SEQUENCE LISTING

<110> Xu, Jiangchun Dillon, Davin C. Mitcham, Jennifer L. Harlocker, Susan L. Jiang, Yuqui Henderson, Robert A. Kalos, Michael D. Fanger, Gary R. Retter, Marc W. Stolk, John A. Day, Craig H. Vedvick, Thomas S. Carter, Darrick Li, Samuel Wang, Aijun Skeiky, Yasir A.W. Hepler, William

<120> COMPOSITIONS AND METHODS FOR THE THERAPY AND DIAGNOSIS OF PROSTATE CANCER

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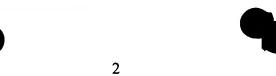
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tgcaaggtgg gcctttgana ngcanctctg gggctcangc ccatggaaag gcgccatcca ntgttctctg gcacctgtca			540
ncaatggctg ctgcatcnac antttcctng aattgtgaca	acacccccca	ntgcccccaa	600 660
ccctcccaac aaagetteec tgttnaaaaa tacnccantt enecteentt tteecenntn aacaaaggge netngenttt tetneenngg aaaaantnee eeectggtt eetnnaanee eee	gaactgcccn	aacccnggaa	720 780 783
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240
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entgacecca acteceence neneantgea gtgatgagtg cagaactgaa ggtnacgtgg
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catgcccagn gttanataac nggcngagag tnantttgcc tctcccttcc ggctgcgcan
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cqnqtntqct taqnqqacat aacctgacta cttaactgaa ccenngaatc tncencecet
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nnaatccncc t
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annttaaatt aaatnttnnt tggnggnnna anccnaatgt nangaaagtt naacccanta
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tnancttnaa tncctggaaa congtngntt ccaaaaatnt ttaaccctta antccctccg
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aaatngttna nggaaaaccc aanttctcnt aaggttgttt gaaggntnaa tnaaaanccc
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nnccaattgt ttttngccac gcctgaatta attggnttcc gntgttttcc nttaaaanaa

ggnnanccc ggttantnaa tccccccnnc cccaattata ccgantttt ttngaattgg ganccencgg gaattaacgg ggnnnntccc tnttgggggg cnggnnccc ccccntcggg ggttngggnc aggncnnaat tgtttaaggg tccgaaaaat ccctccnaga aaaaaanctc ccaggntgag nntngggtt ncccccccc canggcccct ctcgnanagt tggggtttgg ggggcctggg atttntttc ccctnttncc tcccccccc ccnggganag aggttngngt tttgntennc ggccccnccn aagancttn ccganttnan ttaaatccnt gcctnggcga agtccnttgn agggntaaan ggcccctnn cggg	420 480 540 600 660 720 754
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<210> 22 <211> 849 <212> DNA <213> Homo sapien	
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nccetenene ngnegnanen eteeneenee gteteannea eeaeeeegee eegeeaggee nteaneeaen ggnngaenng nagenennte geneegegen gegneneeet egeenengaa etnentengg eeantnnege teaaneenna enaaaegeeg etgegegee egnagegnee neeteenega gteeteeegn etteenaeee angnntteen egaggaeaen nnaeeeegee nneangegg	660 720 780 840 849
<210> 23 <211> 872 <212> DNA <213> Homo sapien	
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<210> 24 <211> 815 <212> DNA <213> Homo sapien <220> <221> misc_feature <222> (1)(815) <223> n = A,T,C or G	
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cccnccctac ccnnctttgg gacngtgacc aantcccgga gtnccagtcc ggccngnctc
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ccccaccggt nnccntgggg gggtgaanct cngnntcanc cngncgaggn ntcgnaagga
                                                                       780
accggncctn ggncgaanng ancnntcnga agngccncnt cgtataaccc cccctcncca
                                                                       815
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agtcaaattt cctgaattgc tatgtgtctg ggtttcatcc atccgacatt gaanttgact
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tactgaagaa tgganagaga attgaaaaag tggagcattc agacttgtct ttcagcaagg
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actggtcttt ctatctcntg tactacactg aattcacccc cactgaaaaa gatgagtatg
                                                                       360
cctqccqtgt gaaccatgtg actttgtcac agcccaagat agttaagtgg gatcgagaca
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tgtaagcagn cnncatggaa gtttgaagat gccgcatttg gattggatga attccaaatt
ctgcttgctt gcnttttaat antgatatgc ntatacaccc taccctttat gnccccaaat
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tgtaggggtt acatnantgt tcncntngga catgatette etttataant cencentteg
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tcttacggaa gggcctgggc cnctttncaa ggttggggga accnaaaatt tcncttntgc
                                                                       720
conceencea enntettgng nneneanttt ggaaccette enatteecet tggeetenna
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gaaaaggtgg cggtccccat cactcctcct ctcccatagc catcccagag gggtgagtag
ccatcangcc ttcggtggga gggagtcang gaaacaacan accacagagc anacagacca
                                                                       240
                                                                       300
ntgatgacca tgggcgggag cgagcctctt ccctgnaccg gggtggcana nganagccta
                                                                       360
nctgagggt cacactataa acgttaacga ccnagatnan cacctgcttc aagtgcaccc
                                                                       420
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acnnagcact cacctgcccc cccatggccg tncgcntccc tggtcctgnc aagggaagct
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gatggaattt tncccttccg gccnntcccc tcttccttta cacgccccct nntactcntc
                                                                       600
tecetetntt nteetgnene aettttnace cennnattte eettnattga teggannetn
                                                                       660
ganattccac tnncgcctnc cntcnatcng naanacnaaa nactntctna cccnggggat
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gggnncctcg ntcatcctct ctttttcnct accnccnntt ctttgcctct ccttngatca
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<210> 28 <211> 731 <212> DNA <213> Homo sapien <220> <221> misc_feature <222> (1)(731) <223> n = A,T,C or G	
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<212> DNA

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                                                                       180
aththtache teatanneet ennnaceeae teeetettaa eeentaetgt geetatngen
tnnctantct ntgccgcctn cnanccaccn gtgggccnac cncnngnatt ctcnatctcc
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tenecatntn geetananta ngtneatace etatacetae necaatgeta nnnetaanen
                                                                       300
                                                                       360
tccatnantt annntaacta ccactgacnt ngactttcnc atnanctcct aatttgaatc
                                                                       420
tactctgact cccacngcct annnattagc anchtccccc nachatntct caaccaaatc
ntcaacaacc tatctanctg ttcnccaacc nttncctccg atccccnnac aacccccctc
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                                                                       600
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tanatccctt ctttcgaaaa ccnacccttt annncccaac ctttngggcc cccccnctnc
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                                                                       780
ccnaatgaag gncncccaat cnangaaacg nccntgaaaa ancnaggcna anannntccg
                                                                       822
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      <211> 787
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      <221> misc feature
      <222> (1)...(787)
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                                                                        240
                                                                        300
acaccagggg ctccaggcag cccattattc ccagnangac atggtgtttc tccacgcgga
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tecenttaat gaaggttaat tgenegettg gegtaateat nggteanaac tnttteetgt
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                                                                        540
gtgaaattgt ttntcccctc ncnattccnc ncnacatacn aacccggaan cataaagtgt
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ccgctttccn ttcnggaaaa ctgtcntccc ctgcnttnnt gaatcggcca ccccccnggg
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aaaagcggtt tgcnttttng ggggntcctt ccncttcccc cctcnctaan ccctncgcct
                                                                        720
                                                                        780
cggtcgttnc nggtngcggg gaangggnat nnnctcccnc naagggggng agnnngntat
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ccccaaa
      <210> 31
      <211> 799
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<212> DNA

<213> Homo sapien

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     <222> (1)...(799)
     <223> n = A, T, C or G
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aacaaaggac teetgeagee ttetetgtet gtetettgge geaggeacat ggggaggeet
                                                                     180
                                                                     240
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                                                                     300
                                                                     360
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cngcanttct ggctgttcat ggaaagcaca ggtgtccnat ttnggctggg acttggtaca
                                                                     420
                                                                     480
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cctgggccct taantaccca caccggaact canttantta ttcatcttng gntgggcttg
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                                                                     600
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nttttnncnt canctaatgc ccccccnggc aacnatccaa tccccccccn tgggggcccc
                                                                     660
                                                                     720
agcccangge eccegneteg ggnnneengn enegnantee ecaggntete ecantengne
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                                                                     240
                                                                     300
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                                                                     420
geggeteegg catetggtet taaacettge aaacnetggg geeetetttt tggttantnt
                                                                     480
ncongocaca atcatnacto agactggono gggotggoco caaaaaanon coccaaaaco
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                                                                     660
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tggnnggcaa gntggntccc ccttcgggcc cccggtgggc ccnnctctaa ngaaaacncc
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                                                                     789
cccccncg
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aattcatggc tgttggagca atanaacccc agttctacga gctgctgatc aaaggacttg
gactaaagtc tgatgaactt cccaatcaga tgagcatgga tgattggcca gaaatgaana
                                                                       180
                                                                       240
agaagtttgc agatgtattt gcaaagaaga cgaaggcaga gtggtgtcaa atctttgacg
gcacagatgc ctgtgtgact ccggttctga cttttgagga ggttgttcat catgatcaca
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                                                                       360
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tggcgtaatc atggtcatan ctgtttcctg tgtgaaattg ttatccgctc acaattccac
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                                                                       660
                                                                       720
gccagctgcc nttaatgaat enggecacee eeeggggaaa aggengtttg ettnttgggg
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                                                                       793
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cagctcaaat gctactactt tgattacaan gagcagctcc ccgagtcagc ctatatgcac
                                                                       360
cagetettgg geeteaacet cetetteetg etgteecaga acegggtgge tgantnecae
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acgganttgg ancggctgcc tgcccaanga catacanacc aatgtctaca tcnaccacca
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gtgtcctgga gcaatactga tgganggcag ctaccncaaa gtnttcctgg ccnagggtaa
                                                                       540
catececege egagagetae acettettea ttgacateet getegacaet ateagggatg
aaaatcgcng ggttgctcca gaaaggctnc aanaanatcc ttttcnctga aggcccccgg
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                                                                       660
atnonctagt notagaateg geoegecate geggtggane etceaacett tegttneect
                                                                       720
ttactgaggg ttnattgccg cccttggcgt tatcatggtc acnccngttn cctgtgttga
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<223> n = A, T, C or G

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taqtcaqaca cnctcttggg caaaaaacan caggatntga gtcttgattt cacctccaat
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aatcttengg getgtetget eggtgaacte gatgaenang ggeagetggt tgtgtntgat
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aaantccanc angttctcct tggtgacctc cccttcaaag ttgttccggc cttcatcaaa
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cttctnnaan angannancc canctttgtc gagctggnat ttgganaaca cgtcactgtt
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qqaaactgat cccaaatggt atgtcatcca tcgcctctgc tgcctgcaaa aaacttgctt
                                                                       480
ggencaaate egacteeen teettgaaag aageenatea caceeeete eetggaetee
                                                                       540
nncaangact ctnccgctnc cccntccnng cagggttggt ggcannccgg gcccntgcgc
                                                                       600
ttcttcagcc agttcacnat nttcatcagc ccctctgcca gctgttntat tccttggggg
                                                                       660
qqaanccqtc tctcccttcc tgaannaact ttgaccgtng gaatagccgc gcntcnccnt
                                                                       720
achtnetggg eegggtteaa anteceteen ttgnennten eetegggeea ttetggattt
                                                                       780
nccnaacttt ttccttcccc cnccccncgg ngtttggntt tttcatnggg ccccaactct
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getnttggcc anteccetgg gggcntntan enceceetnt ggtccentng ggcc
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      <211> 814
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      <221> misc feature
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cctagnaaac attaatgggt tgctctacta atacatcata cnaaccagta agcctgccca
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naacgccaac tcaggccatt cctaccaaag gaagaaaggc tggtctctcc accccctgta
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ggaaaggcct gccttgtaag acaccacaat ncggctgaat ctnaagtctt gtgttttact
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aatggaaaaa aaaaataaac aanaggtttt gttctcatgg ctgcccaccg cagcctggca
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ctaaaacanc ccagcgctca cttctgcttg ganaaatatt ctttgctctt ttggacatca
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ggcttgatgg tatcactgcc acntttccac ccagctgggc ncccttcccc catntttgtc
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aggggangtc ntttncagtg gatctgccaa anantacccn tatcatcnnt gaataaaaag
                                                                       540
                                                                       600
gcccctgaac ganatgcttc cancancctt taagacccat aatcctngaa ccatggtgcc
                                                                       660
cttccggtct gatccnaaag gaatgttcct gggtcccant ccctcctttg ttncttacgt
                                                                       720
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                                                                       780
atttganttt cntaaattct ctgccctacn nctgaaagca cnattccctn ggcnccnaan
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ggngaactca agaaggtctn ngaaaaacca cncn
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      <221> misc feature
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      <223> n = A, T, C or G
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ggccgcctta agctttctaa atttggaaca cgcaaaatca ctcgggggaa nggaaaggtt ttaactgctt gtacaattac ntttcacttt cttgggggt ccctcccan accaaccccr tcccggcnnt cnttgaaaca cacngcngaa tgaagggtta ccatntttaa cnccacctca ccctcaancn aattnctnng ccccggtcna caccccnga anncnntnnc naacnaaatt cnnagactnt cctcnncnan cncaatttta nnnncncctc cnctngtccn naatcnccar	c gctttgttaa t taattaattg n ctgacaaaaa ngttctcatt acntggcnnn c gcntnngtcc c ccgaaaatat c ttttnntcac	tcatgcccta tgctnaangc gtgccngccc ntccccncnc gcctgaatcc cncccgggct tcccnntcnc	tggtgggtga tttaattana tcaaatnatg caggtnaaaa tcnaaaancn ccgggaantn tcaattccc	240 300 360 420 480 540 600 660 720 751
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tcagatgcct tgctaagtct agagttctag agttatgttt cagaaagtct aagaaaccca	180
cctcttgaga ggtcagtaaa gaggacttaa tatttcatat ctacaaaatg accacaggat	240
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togaa	305
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-	
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tgctgttgtt cttctttta ccccatagct gagccactgc ctctgatttc aagaacctga	300 360
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gcctcgtttc tggctggggt ctgctggcga acggcagaat gcctaccgtg ctgcagtgcg	180
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                                                                       180
aagaagataa tatattccaa gcanatacaa aatatctaat gaaagatcaa ggcaggaaaa
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                                                                       360
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ttacaatqqc ttaaatqcan ggaaaaagca gtggaagtag ggaagtantc aaggtctttc
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ggctcctgtt atatccacaa tcccagcagc aagatgaagg gatgaaaaag gacacatgct
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                                                                       590
qccttccttt gaggagactt catctcactg gccaacactc agtcacatgt
      <210> 47
      <211> 774
      <212> DNA
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      <221> misc feature
      <222> (1)...(774)
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                                                                       120
                                                                       180
gcttcactgc ttgaaactta aatggatgtg ggacanaatt ttctgtaatg accctgaggg
                                                                       240
cattacagac gggactctgg gaggaaggat aaacagaaag gggacaaagg ctaatcccaa
                                                                       300
aacatcaaaq aaaggaaggt ggcgtcatac ctcccagcct acacagttct ccagggctct
                                                                       360
cctcatccct ggaggacgac agtggaggaa caactgacca tgtccccagg ctcctgtgtg
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ctggctcctg gtcttcagcc cccagctctg gaagcccacc ctctgctgat cctgcgtggc
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cctacttccg agatgccttg ctccctgcag cctgtcaaaa tcccactcac cctccaaacc
                                                                       540
                                                                       600
acggcatggg aagcctttct gacttgcctg attactccag catcttggaa caatccctga
                                                                       660
ttccccactc cttagaggca agatagggtg gttaagagta gggctggacc acttggagcc
                                                                       720
aggetgetgg cttcaaattn tggeteattt acgagetatg ggacettggg caagtnatet
                                                                       774
tcacttctat gggcntcatt ttgttctacc tgcaaaatgg gggataataa tagt
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      <211> 124
      <212> DNA
      <213> Homo sapien
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<210> 52 <211> 491 <212> DNA <213> Homo sapien	
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Thr Glu Gly Leu Leu A	55		60	
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Gln Glu Asp Met Asp V	aı Aıa Leu M			ser
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ccttatttgt cttctacacc ccacagggcc ccctacttct tcggatgtgt ttttaataat
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ttttcacatt tcaacttgta tgtgtttgtc tcttanagca ttggtgaaat cacatatttt
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atattcagca taaaggagaa
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gcttttagcc tccanaagtt tctctgaagc caaccaaacc tctangtgta aggcatgctg gccctggt	300 308
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canagaaggc agctacggct actcctacat cctggcgtgg gtggccttcg cctgcacctt
                                                                        137
catcagcggc atgatgt
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      <211> 469
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      <400> 164
                                                                         60
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tgcaatgcat catgctattt catacctaat gagggagttc caggagattc aaccaggaaa
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tqcatqqatc tcaaaggaaa caaacaccca ataaactcgg agtggcagac tgacaactgt
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qaqacatqca cttqctacqa aacagaaatt tcatqttqca cccttqtttc tacacctqtq
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ggttatgaca aagacaactg ccaaagaatc ttcaagaagg aggactgcaa gtatatcgtg
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gtggagaaga aggacccaaa aaagacctgt tctgtcagtg aatggataat ctaatgtgct
                                                                        420
tctagtaggc acagggctcc caggccaggc ctcattctcc tctggcctct aatagtcaat
                                                                        469
gattgtgtag ccatgcctat cagtaaaaag atntttgagc aaacacttt
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      <211> 195
      <212> DNA
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                                                                        120
atccgctgtc atccactatt ccttggctag agtaaaaatt attcttatag cccatgtccc
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cccagccct cctcctcag acccaggagt ccagacccc cagccctcc tcctcagac ccaggagtcc agccctcct ccctcagacc caggagtcca gacccccag ccctcctcc ctcagaccca ggggtccagg ccccaaccc ctcctcctc agactcagag gtccaagccc ccaacccntc attccccaga cccagaggtc caggtccaag cccttaga ctntccctgt acacagtgcc cccttgtggc acgttgaccc accttacca gttggtttt cattttngt ccctttcccc tagatccaga aataaagttt aagagaagng caaaaaaaaa aaaaaaaaa aaaaaaaaa aaaaaaaa
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Glu Ser Asp Thr Ile Arg Ser Ile Ser Ile Ala Ser Gln Cys Pro Thr 35 40 45
Ala Gly Asn Ser Cys Leu Val Ser Gly Trp Gly Leu Leu Ala Asn Gly 50 55 60
Arg Met Pro Thr Val Leu Gln Cys Val Asn Val Ser Val Val Ser Glu
65 70 75 60 Glu Val Cys Ser Lys Leu Tyr Asp Pro Leu Tyr His Pro Ser Met Phe 85 90 95
Cys Ala Gly Gly Gln Xaa Gln Xaa Asp Ser Cys Asn Gly Asp Ser
Gly Gly Pro Leu Ile Cys Asn Gly Tyr Leu Gln Gly Leu Val Ser Phe 115 120 125
Gly Lys Ala Pro Cys Gly Gln Val Gly Val Pro Gly Val Tyr Thr Asn 130 135 140
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tacaccateg ggetgggeet geacagtett gaggeegaec aagagecagg gagecagatg

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Asn Ser Cys Leu Val Ser Gly Trp Gly Leu Leu Ala Asn Gly Arg Met
                                                     110
                                105
Pro Thr Val Leu His Cys Val Asn Val Ser Val Val Ser Glu Xaa Val
                            120
        115
Cys Ser Lys Leu Tyr Asp Pro Leu Tyr His Pro Ser Met Phe Cys Ala
                        135
                                             140
Gly Gly Gln Asp Gln Lys Asp Ser Cys Asn Gly Asp Ser Gly Gly
                                         155
                    150
Pro Leu Ile Cys Asn Gly Tyr Leu Gln Gly Leu Val Ser Phe Gly Lys
                                                         175
                                    170
                165
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Lys Phe Thr Glu Trp Ile Glu Lys Thr Val Gln Xaa Ser
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Gly	Leu		20 Ser	Leu	Glu	Ala			Glu	Pro	Gly	Ser 45		Met	Val	
Glu		35 Ser	Leu	Ser	Val	Arg 55	40 His	Pro	Glu	Tyr	Asn 60		Pro	Leu	Leu	
	50 Asn	Asp	Leu	Met	Leu 70	-	Lys	Leu	Asp	Glu 75		Val	Ser	Glu	Ser 80	
65 Asp	Thr	Ile	Arg	Ser 85		Ser	Ile	Ala	Ser 90		Cys	Pro	Thr	Ala 95		
Asn	Ser	Cys			Ser	Gly	Trp	Gly 105		Leu	Ala	Asn	Asp	Ala	Val	
Ile	Ala		100 Gln	Ser	Xaa	Thr	Val 120		Gly	Trp	Glu	Cys 125		Lys	Leu	
Ser		115 Pro	Trp	Gln	Gly	Cys 135		Ile	Ser	Ala	Thr 140		Ser	Ala	Arg	
	130 Ser	Cys	Cys	Ile			Gly	Суѕ	Ser	Leu 155		Leu	Thr	Ala	Ser 160	
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ctg	gagt: acta:	gcc :	ttgg ccaa	tgtt: ccaa	tc a qq q	agcc atqc	cctg gagg	c ag c tc	gaag qgaq	caga cacc	atg ctt	cacc gccc	ggc	tgag tgtg	gcacct attgct	60 120
gcc	aggc	act	gttc	atct	ca g	cttt	tctg	t cc	cttt	gctc	ccg	gcaa	gcg	cttc	tgctga	180 240
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cccatcctgc tcggttctcc ccagatgaca aatactctsg acaccgaatc accatcaaga
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aacgettcaa ggtgetcatg acceageaac egegeeetgt cetetgaggg tecettaaac
tgatgtcttt tctgccacct gttacccctc ggagactccg taaccaaact cttcggactg
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                                                                       360
tgagecetga tgeetttttg ecagecatae tetttggeat ecagtetete gtggegattg
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<210> 192 <211> 601 <212> DNA	

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<213> Homo sapien
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      <222> (1)...(601)
      <223> n = A, T, C or G
      <400> 192
                                                                        60
gageteggat ecaataatet ttgtetgagg geageacaea tatneagtge eatggnaact
ggtctacccc acatgggagc agcatgccgt agntatataa ggtcattccc tgagtcagac
                                                                        120
                                                                        180
atgcytyttt gaytaccgtg tgccaagtgc tggtgattct yaacacacyt ccatcccgyt
                                                                        240
cttttgtgga aaaactggca cttktctgga actagcarga catcacttac aaattcaccc
                                                                        300
acgagacact tgaaaggtgt aacaaagcga ytcttgcatt gctttttgtc cctccggcac
                                                                        360
cagttgtcaa tactaacccg ctggtttgcc tccatcacat ttgtgatctg tagctctgga
                                                                        420
tacatctcct gacagtactg aagaacttct tcttttgttt caaaagcarc tcttggtgcc
                                                                        480
tgttggatca ggttcccatt tcccagtcyg aatgttcaca tggcatattt wacttcccac
                                                                        540
aaaacattgc gatttgaggc tcagcaacag caaatcctgt tccggcattg gctgcaagag
cctcgatgta gccggccagc gccaaggcag gcgccgtgag ccccaccagc agcagaagca
                                                                        600
                                                                        601
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      <211> 608
      <212> DNA
      <213> Homo sapien
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      <221> misc feature
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      <223> n = A, T, C or G
      <400> 193
                                                                         60
atacagocca natoccacca cgaagatgog cttgttgact gagaacctga tgcggtcact
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ggtcccgctg tagccccagc gactctccac ctgctggaag cggttgatgc tgcactcytt
                                                                        180
cccaacgcag gcagmagcgg gsccggtcaa tgaactccay tcgtggcttg gggtkgacgg
                                                                        240
tkaagtgcag gaagaggctg accacctcgc ggtccaccag gatgcccgac tgtgcgggac
                                                                        300
ctgcagcgaa actcctcgat ggtcatgagc gggaagcgaa tgaggcccag ggccttgccc
                                                                        360
agaaccttcc gcctgttctc tggcgtcacc tgcagctgct gccgctgaca ctcggcctcg
                                                                        420
gaccagcgga caaacggcrt tgaacagccg cacctcacgg atgcccagtg tgtcgcgctc
                                                                        480
caggammgsc accagcgtgt ccaggtcaat gtcggtgaag ccctccgcgg gtratggcgt
                                                                        540
ctgcagtgtt tttgtcgatg ttctccaggc acaggctggc cagctgcggt tcatcgaaga
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gtcgcgcctg cgtgagcagc atgaaggcgt tgtcggctcg cagttcttct tcaggaactc
                                                                        608
cacgcaat
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      <211> 392
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
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      <223> n = A, T, C or G
      <400> 194
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	<210> 1 <211> 5 <212> E <213> F	502	:n				
	<222> (<223> r	nisc_featu (1)(502 n = A,T,C	!)				
c a c c g	<pre><400> 1 csttkgagg gg cgagctgag gg ctcncaagg aa agggaaggc cc cccasgagg aa aaatgcaag ct scscacacc ca carcgtgga ca ctnanaaaa aa</pre>	gtkaggkyc cagatgttc aagaccacs ccattccgg agaggcct tcaccaagg acccagagc atctngtcc	ccacagtgac ttctggggac ggstgttccc gagtcctggg tcccctctca acgccacccg cagaaggggg	ccccagagcc atgggctgga cgaggaggaa atcagacacc gtccccttcc ccatggggar	stgggstata gggcaggacc gggaagggc ccttcacgtg stacaccctg tgtgctcaag	gtytctgacc tagaggcacc tctgtgtgcc tatccccaca amcggccact gartcgcngg	60 120 180 240 300 360 420 480 502
	<210> 1 <211> 6 <212> I <213> F	665	en	·			
	<222>	misc_featu (1)(665 n = A,T,C	5)				
w a a a t w t t	<pre><400> 1 gttacttgg tf ctctggaag cc agctgtttk ga ctwatttat ta agtatgatg aa ttaatcggc aa cacttggtt af atatttatt tc cttgacaga aa tcttagaat gd ttgcaatca ga agtg</pre>	ttcattgcc cttgcgcag agttgatts atcttgtga aaagcaawa aaatgtgga ttttattgt cattaattt atcgatctt	agcggacttt gcaccactgc aaagtataac gatatatatt gtgtatgttc aaatgartta ctttcctkgt gatgctgtgg tgtagcccat	gtaattgttg acccacaact aatgaaaatt cttttattat ttttcacagt caaaattctt ttacgtwaat aagtagtttg cnaacttcaa	gagaataact tcaatatgaa ttgttcatac gttaaattat aatatatgcc aatttaagar tttgaaaaga acccacatcc agaaaaaaaa	gctgaatttt aacyawttga tgtattkatc gattgccatt ttttgtaact aatggtatgt wtgcatgatt ctatgagttt gaccacatac	60 120 180 240 300 360 420 480 540 600 665

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<211> 492
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc_feature
      <222> (1)...(492)
      <223> n = A, T, C or G
      <400> 197
                                                                         60
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                                                                       120
atgtttattg gagcgatcca ttatcagtga aaagtatcaa gtgtttataa natttttagg
                                                                       180
aaqqcaqatt cacaqaacat gctngtcngc ttgcagtttt acctcgtana gatnacagag
aattatagtc naaccagtaa acnaggaatt tacttttcaa aagattaaat ccaaactgaa
                                                                        240
                                                                        300
caaaattcta ccctgaaact tactccatcc aaatattgga ataanagtca gcagtgatac
                                                                       360
attctcttct gaactttaga ttttctagaa aaatatgtaa tagtgatcag gaagagctct
                                                                        420
tgttcaaaag tacaacnaag caatgttccc ttaccatagg ccttaattca aactttgatc
catttcactc ccatcacggg agtcaatgct acctgggaca cttgtatttt gttcatnctg
                                                                        480
                                                                        492
ancntggctt aa
      <210> 198
      <211> 478
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(478)
      <223> n = A, T, C or G
      <400> 198
tttnttttgn atttcantct gtannaanta ttttcattat gtttattana aaaatatnaa
                                                                         60
tgtntccacn acaaatcatn ttacntnagt aagaggccan ctacattgta caacatacac
                                                                        120
tgagtatatt ttgaaaagga caagtttaaa gtanacncat attgccganc atancacatt
                                                                        180
                                                                        240
tatacatggc ttgattgata tttagcacag canaaactga gtgagttacc agaaanaaat
                                                                        300
natatatgtc aatcngattt aagatacaaa acagatccta tggtacatan catcntgtag
                                                                        360
gagttgtggc tttatgttta ctgaaagtca atgcagttcc tgtacaaaga gatggccgta
agcattctag tacctctact ccatggttaa gaatcgtaca cttatgttta catatgtnca
                                                                        420
                                                                        478
gggtaagaat tgtgttaagt naanttatgg agaggtccan gagaaaaatt tgatncaa
      <210> 199
      <211> 482
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(482)
      <223> n = A, T, C or G
      <400> 199
                                                                         60
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                                                                        120
tgctagttcc tgtcatctat tcgctactaa atgcagactg gaggggacca aaaaggggca
tcaactccag ctggattatt ttggagcctg caaatctatt cctacttgta cggactttga
                                                                        180
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tgaagccnac totgaacacg otggttatot nagatgagaa noagagaaat aaagtonaga	240 300 360 420 480 482
<210> 200 <211> 270 <212> DNA <213> Homo sapien	
<220> <221> misc_feature <222> (1)(270) <223> n = A,T,C or G	
<400> 200 cggccgcaag tgcaactcca gctggggccg tgcggacgaa gattctgcca gcagttggtc cgactgcgac gacggcggcg gcgacagtcg caggtgcagc gcgggcgcct ggggtcttgc aaggctgagc tgacgccgca gaggtcgtgt cacgtcccac gaccttgacg ccgtcggga cagccggaac agagcccggt gaangcggga ggcctcgggg agcccctcgg gaagggcggc ccgagagata cgcaggtgca ggtggccgcc	60 120 180 240 270
<210> 201 <211> 419 <212> DNA <213> Homo sapien	
<220> <221> misc_feature <222> (1)(419) <223> n = A,T,C or G	
<pre><400> 201 tttttttt ttttggaatc tactgcgagc acagcaggtc agcaacaagt ttattttgca gctagcaagg taacagggta gggcatggtt acatgttcag gtcaacttcc tttgtcgtgg ttgattggtt tgtctttatg ggggcggggt ggggtagggg aaancgaagc anaantaaca tggagtgggt gcaccetccc tgtagaacct ggttacnaaa gcttggggca gttcacctgg tctgtgaccg tcattttctt gacatcaatg ttattagaag tcaggatatc ttttagagag tccactgtnt ctggagggag attagggttt cttgccaana tccaancaaa atccacntga aaaagttgga tgatncangt acngaatacc ganggcatan ttctcatant cggtggcca</pre>	60 120 180 240 300 360 419
<210> 202 <211> 509 <212> DNA <213> Homo sapien	
<220> <221> misc_feature <222> (1)(509) <223> n = A,T,C or G	
<400> 202	

tttnttttt tttttttt tttttttt ttttttt tttttt	taant ttnaatnono cattataong 120 1900 1900 1900 1900 1900 1900 1900
<210> 203 <211> 583 <212> DNA <213> Homo sapien <220> <221> misc_feature	
<222> (1)(583) <223> n = A,T,C or G	
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<210> 204 <211> 589 <212> DNA <213> Homo sapien	
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<210> 205
      <211> 545
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(545)
      <223> n = A, T, C or G
      <400> 205
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                                                                         60
agaaaagtgc cttacattta ataaaagttt gtttctcaaa gtgatcagag gaattagata
                                                                        120
tngtcttgaa caccaatatt aatttgagga aaatacacca aaatacatta agtaaattat
                                                                        180
ttaagatcat agagcttgta agtgaaaaga taaaatttga cctcagaaac tctgagcatt
                                                                        240
aaaaatccac tattagcaaa taaattacta tggacttctt gctttaattt tgtgatgaat
                                                                        300
atggggtgtc actggtaaac caacacattc tgaaggatac attacttagt gatagattct
                                                                        360
tatgtacttt gctanatnac gtggatatga gttgacaagt ttctctttct tcaatctttt
                                                                        420
aaggggcnga ngaaatgagg aagaaaagaa aaggattacg catactgttc tttctatngg
                                                                        480
                                                                        540
aaggattaga tatgtttcct ttgccaatat taaaaaaata ataatgttta ctactagtga
                                                                        545
aaccc
      <210> 206
      <211> 487
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(487)
      \langle 223 \rangle n = A,T,C or G
      <400> 206
                                                                          60
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                                                                        120
catttattag ctctgcaact tacatattta aattaaagaa acgttnttag acaactgtna
                                                                        180
caatttataa atgtaaggtg ccattattga gtanatatat tcctccaaga gtggatgtgt
cccttctccc accaactaat gaancagcaa cattagttta attttattag tagatnatac
                                                                        240
                                                                        300
actgctgcaa acgctaattc tcttctccat ccccatgtng atattgtgta tatgtgtgag
ttggtnagaa tgcatcanca atctnacaat caacagcaag atgaagctag gcntgggctt
                                                                        360
tcggtgaaaa tagactgtgt ctgtctgaat caaatgatct gacctatcct cggtggcaag
                                                                        420
aactettega acceettect caaaggenge tgecacattt gtggentetn ttgeacttgt
                                                                         480
                                                                         487
ttcaaaa
      <210> 207
      <211> 332
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(332)
      <223> n = A, T, C or G
      <400> 207
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tgaattggct aaaagactgc atttttanaa ctagcaactc ttatttcttt cctttaaaaa tacatagcat taaatcccaa atcctatta aagacctgac agcttgagaa ggtcactact gcatttatag gaccttctgg tggttctgct gttacntttg aantctgaca atccttgana atctttgcat gcagaggagg taaaaggtat tggattttca cagaggaana acacagcgca gaaatgaagg ggccaggctt actgagcttg tccactggag ggctcatggg tgggacatgg aaaagaaggc agcctaggcc ctggggagcc ca	60 120 180 240 300 332
<210> 208 <211> 524 <212> DNA <213> Homo sapien	
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agggegtggt geggagggeg ttactgttt gtctcagtaa caataaatac aaaaagactg gttgtgttcc ggccccatcc aaccacgaag ttgatttctc ttgtgtgcag agtgactgat ttaaaggac atggagcttg tcacaatgtc acaatgtcac agtgtgaagg gcacactcac tcccgcgtga ttcacattta gcaaccaaca atagctcatg agtccatact tgtaaatact tttggcagaa tacttnttga aacttgcaga tgataactaa gatccaagat atttcccaaa gtaaatagaa gtgggtcata atattaatta cctgttcaca tcagcttcca tttacaagtc atgagccag acactgacat caaactaagc ccacttagac tcctcaccac cagtctgtcc tgtcatcaga caggaggctg tcaccttgac caaattctca ccagtcaatc atctatccaa aaaccattac ctgatccact tccggtaatg caccaccttg gtga	60 120 180 240 300 360 420 480 524
<210> 209 <211> 159 <212> DNA <213> Homo sapien	
<pre><400> 209 gggtgaggaa atccagagtt gccatggaga aaattccagt gtcagcattc ttgctccttg tggccctctc ctacactctg gccagagata ccacagtcaa acctggagcc aaaaaggaca caaaggactc tcgacccaaa ctgccccaga ccctctcca <210> 210</pre>	60 120 159
<211> 256 <212> DNA <213> Homo sapien	
<220> <221> misc_feature <222> (1)(256) <223> n = A,T,C or G	
<400> 210 actccctggc agacaaaggc agaggagaga gctctgttag ttctgtgttg ttgaactgcc actgaatttc tttccacttg gactattaca tgccanttga gggactaatg gaaaaacgta tggggagatt ttanccaatt tangtntgta aatggggaga ctggggcagg cgggagagat ttgcagggtg naaatgggan ggctggtttg ttanatgaac agggacatag gaggtaggca ccaggatgct aaatca	60 120 180 240 256

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<210> 211
      <211> 264
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc_feature
      <222> (1)...(264)
      <223> n = A, T, C or G
      <400> 211
                                                                         60
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actggaacac atacccacat ctttgttctg agggataatt ttctgataaa gtcttgctgt
                                                                        120
                                                                        180
atattcaagc acatatgtta tatattattc agttccatgt ttatagccta gttaaggaga
                                                                        240
ggggagatac attcngaaag aggactgaaa gaaatactca agtnggaaaa cagaaaaaga
                                                                        264
aaaaaaggag caaatgagaa gcct
      <210> 212
      <211> 328
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(328)
      <223> n = A, T, C or G
      <400> 212
                                                                         60
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ggatttaatg ttgtctcagc ttgggcactt cagttaggac ctaaggatgc cagccggcag
                                                                        120
                                                                        180
gtttatatat gcagcaacaa tattcaagcg cgacaacagg ttattgaact tgcccgccag
                                                                        240
ttnaatttca ttcccattga cttgggatcc ttatcatcag ccagagagat tgaaaattta
cccctacnac tctttactct ctgganaggg ccagtggtgg tagctataag cttggccaca
                                                                        300
                                                                        328
ttttttttc ctttattcct ttgtcaga
      <210> 213
      <211> 250
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(250)
      <223> n = A, T, C or G
      <400> 213
acttatgagc agagcgacat atccnagtgt agactgaata aaactgaatt ctctccagtt
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taaagcattg ctcactgaag ggatagaagt gactgccagg agggaaagta agccaaggct
                                                                        120
cattatgcca aagganatat acatttcaat tctccaaact tcttcctcat tccaagagtt
                                                                        180
ttcaatattt gcatgaacct gctgataanc catgttaana aacaaatatc tctctnacct
                                                                        240
                                                                         250
tctcatcggt
```

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<211> 444
     <212> DNA
     <213> Homo sapien
     <220>
     <221> misc_feature
      <222> (1)...(444)
      <223> n = A, T, C or G
      <400> 214
acccagaatc caatgctgaa tatttggctt cattattccc agattctttg attgtcaaag
                                                                         60
                                                                       120
gatttaatgt tgtctcagct tgggcacttc agttaggacc taaggatgcc agccggcagg
                                                                       180
tttatatatg cagcaacaat attcaagcgc gacaacaggt tattgaactt gcccgccagt
                                                                       240
tgaatttcat tcccattgac ttgggatcct tatcatcagc canagagatt gaaaatttac
ccctacgact ctttactctc tggagagggc cagtggtggt agctataagc ttggccacat
                                                                       300
                                                                       360
tttttttcc tttattcctt tgtcagagat gcgattcatc catatgctan aaaccaacag
agtgactttt acaaaattcc tataganatt gtgaataaaa ccttacctat agttgccatt
                                                                       420
                                                                       444
actttgctct ccctaatata cctc
      <210> 215
      <211> 366
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc feature
      <222> (1)...(366)
      <223> n = A, T, C or G
      <400> 215
                                                                         60
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                                                                       120
taaagcattg ctcactgaag ggatagaagt gactgccagg agggaaagta agccaaggct
                                                                       180
cattatgcca aagganatat acatttcaat tctccaaact tcttcctcat tccaagagtt
ttcaatattt gcatgaacct gctgataagc catgttgaga aacaaatatc tctctgacct
                                                                        240
tctcatcggt aagcagaggc tgtaggcaac atggaccata gcgaanaaaa aacttagtaa
                                                                        300
                                                                        360
tccaagctgt tttctacact gtaaccaggt ttccaaccaa ggtggaaatc tcctatactt
                                                                        366
ggtgcc
      <210> 216
      <211> 260
      <212> DNA
      <213> Homo sapien
      <220>
      <221> misc_feature
      <222> (1)...(260)
      <223> n = A, T, C or G
      <400> 216
                                                                         60
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caagacaggg gcctaaggag ggtctccaca ctgctnntaa gggctnttnc attttttat
                                                                        120
                                                                        180
taataaaaag tnnaaaaggc ctcttctcaa cttttttccc ttnggctgga aaatttaaaa
                                                                        240
atcaaaaatt tootnaagtt ntcaagctat catatatact ntatootgaa aaagcaacat
                                                                        260
aattcttcct tccctccttt
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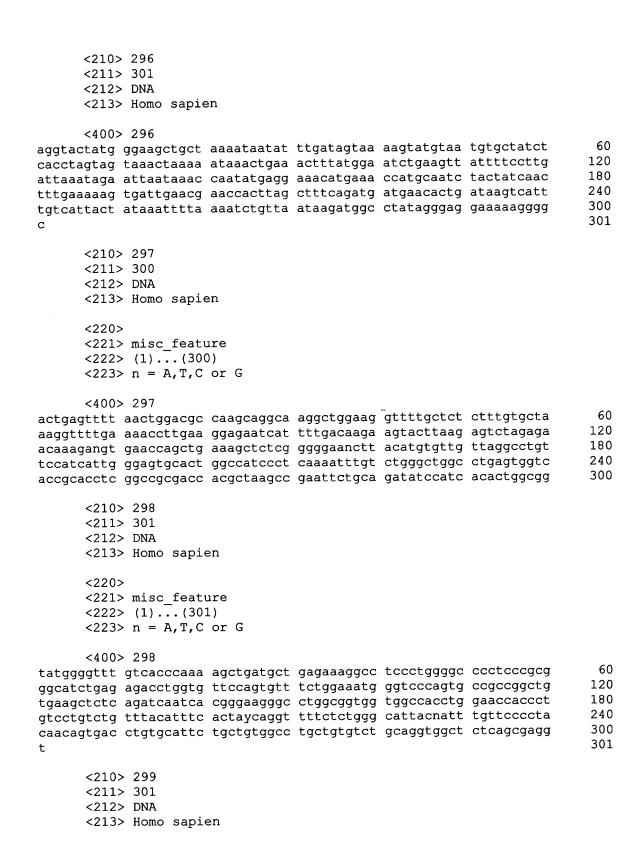
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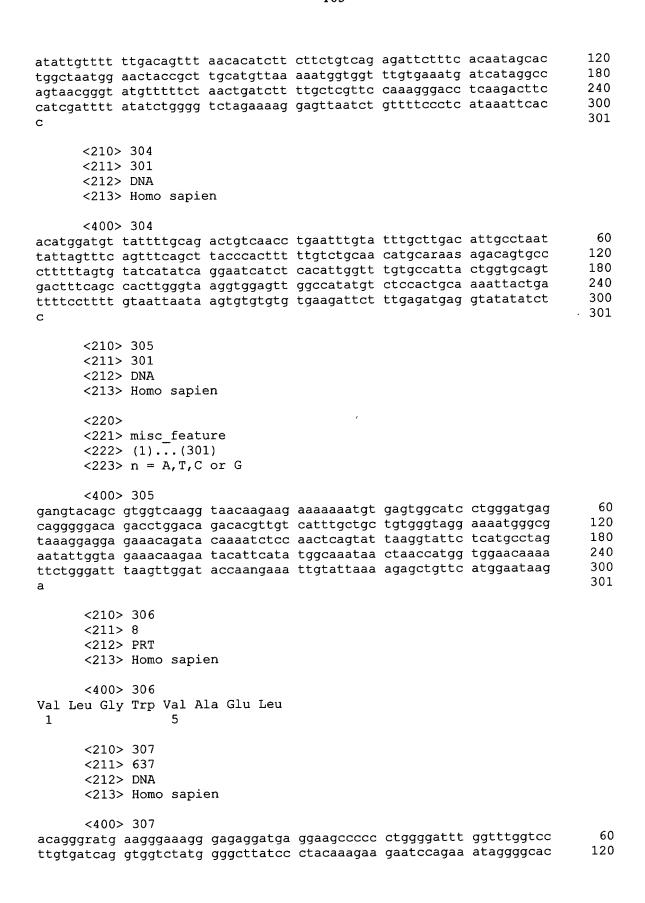
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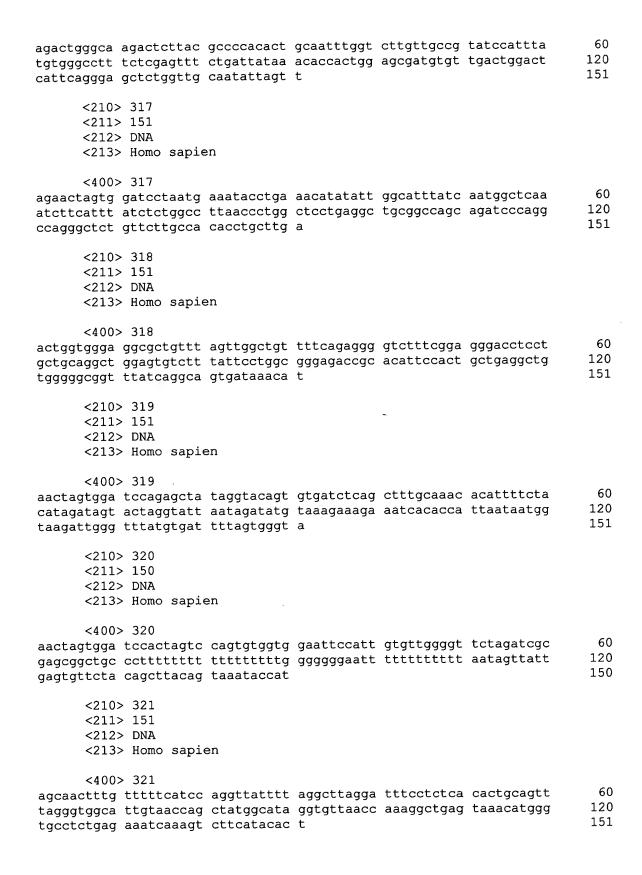


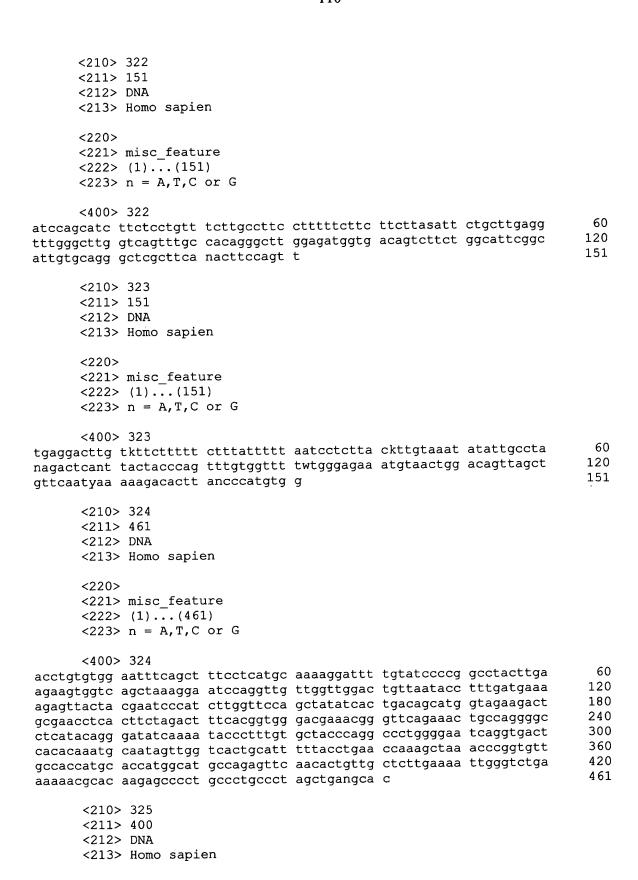
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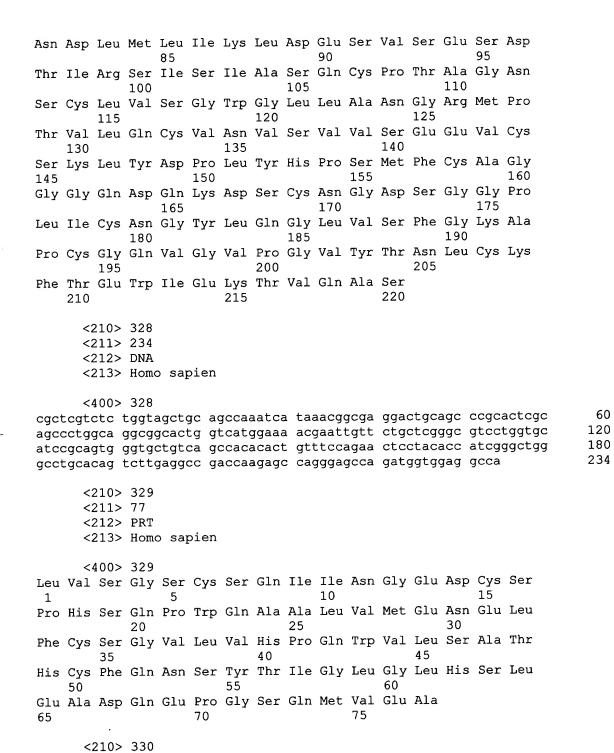
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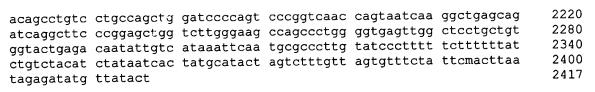
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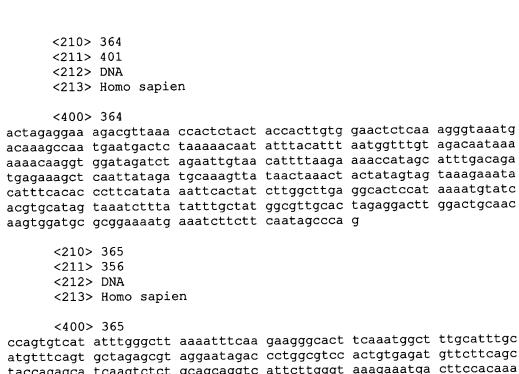
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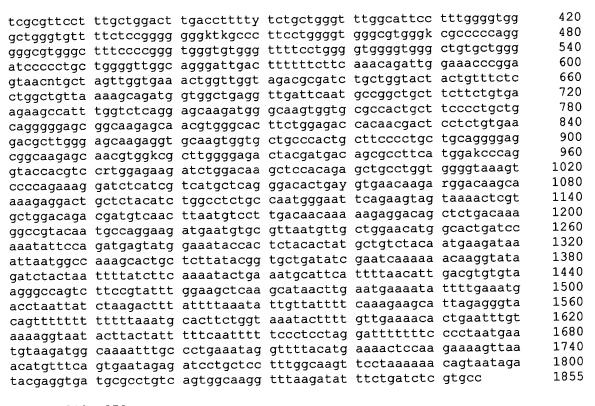
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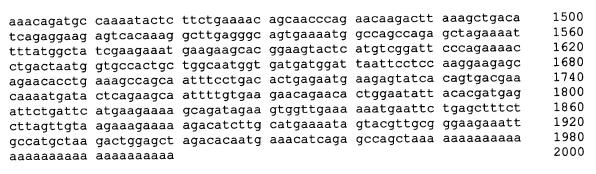
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<210> 375 <211> 2040 <212> DNA <213> Homo sapien

<400> 375

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<210> 376

<211> 329



<212> PRT <213> Homo sapien

<400> 376 Met Asp Ile Val Val Ser Gly Ser His Pro Leu Trp Val Asp Ser Phe 10 Leu His Leu Ala Gly Ser Asp Leu Leu Ser Arg Ser Leu Met Ala Glu Glu Tyr Thr Ile Val His Ala Ser Phe Ile Ser Cys Ile Ser Ser Leu Asp Gly Gln Gly Glu Arg Gln Glu Gln Arg Gly His Phe Trp Arg Pro Gln Arg Leu Leu Cys Glu Asp Ala Trp Glu Gln Glu Val Gln Val 75 Val Leu Pro Leu Leu Pro Leu Leu Gln Gly Ser Gly Lys Ser Asn Val 85 90 Val Ala Trp Gly Asp Tyr Asp Asp Ser Ala Phe Met Asp Pro Arg Tyr 105 His Val His Gly Glu Asp Leu Asp Lys Leu His Arg Ala Ala Trp Trp 120 Gly Lys Val Pro Arg Lys Asp Leu Ile Val Met Leu Arg Asp Thr Asp 135 140 Val Asn Lys Arg Asp Lys Gln Lys Arg Thr Ala Leu His Leu Ala Ser 155 150 Ala Asn Gly Asn Ser Glu Val Val Lys Leu Val Leu Asp Arg Arg Cys 170 165 Gln Leu Asn Val Leu Asp Asn Lys Lys Arg Thr Ala Leu Thr Lys Ala 185 Val Gln Cys Gln Glu Asp Glu Cys Ala Leu Met Leu Leu Glu His Gly 205 200 Thr Asp Pro Asn Ile Pro Asp Glu Tyr Gly Asn Thr Thr Leu His Tyr 220 215 Ala Val Tyr Asn Glu Asp Lys Leu Met Ala Lys Ala Leu Leu Leu Tyr 235 230 Gly Ala Asp Ile Glu Ser Lys Asn Lys His Gly Leu Thr Pro Leu Leu 250 245 Leu Gly Ile His Glu Gln Lys Gln Gln Val Val Lys Phe Leu Ile Lys 265 Lys Lys Ala Asn Leu Asn Ala Leu Asp Arg Tyr Gly Arg Thr Ala Leu 280 Ile Leu Ala Val Cys Cys Gly Ser Ala Ser Ile Val Ser Pro Leu Leu 295 Glu Gln Asn Val Asp Val Ser Ser Gln Asp Leu Glu Arg Arg Pro Glu 315 310 Ser Met Leu Phe Leu Val Ile Ile Met

<210> 377

<211> 148

<212> PRT

<213> Homo sapien

<220>

<221> VARIANT

<222> (1)...(148) <223> Xaa = Any Amino Acid

<400> 377

Met Thr Xaa Pro Ser Trp Ser Pro Gly Thr Thr Ser Val Glu Lys Ile Trp Thr Ser Ser Thr Glu Leu Pro Trp Trp Gly Lys Val Pro Arg Lys Asp Leu Ile Val Met Leu Arg Asp Thr Asp Val Asn Lys Xaa Asp Lys 40 Gln Lys Arg Thr Ala Leu His Leu Ala Ser Ala Asn Gly Asn Ser Glu Val Val Lys Leu Xaa Leu Asp Arg Arg Cys Gln Leu Asn Val Leu Asp Asn Lys Lys Arg Thr Ala Leu Xaa Lys Ala Val Gln Cys Gln Glu Asp 85 Glu Cys Ala Leu Met Leu Leu Glu His Gly Thr Asp Pro Asn Ile Pro 105 Asp Glu Tyr Gly Asn Thr Thr Leu His Tyr Ala Xaa Tyr Asn Glu Asp 120 Lys Leu Met Ala Lys Ala Leu Leu Leu Tyr Gly Ala Asp Ile Glu Ser 130 135 Lys Asn Lys Val

<210> 378 <211> 1719 <212> PRT <213> Homo sapien

<400> 378

Met Val Val Glu Val Asp Ser Met Pro Ala Ala Ser Ser Val Lys Lys Pro Phe Gly Leu Arg Ser Lys Met Gly Lys Trp Cys Cys Arg Cys Phe Pro Cys Cys Arg Glu Ser Gly Lys Ser Asn Val Gly Thr Ser Gly Asp His Asp Asp Ser Ala Met Lys Thr Leu Arg Ser Lys Met Gly Lys Trp 55 Cys Arg His Cys Phe Pro Cys Cys Arg Gly Ser Gly Lys Ser Asn Val 70 75 Gly Ala Ser Gly Asp His Asp Asp Ser Ala Met Lys Thr Leu Arg Asn Lys Met Gly Lys Trp Cys Cys His Cys Phe Pro Cys Cys Arg Gly Ser Gly Lys Ser Lys Val Gly Ala Trp Gly Asp Tyr Asp Asp Ser Ala Phe 120 Met Glu Pro Arg Tyr His Val Arg Gly Glu Asp Leu Asp Lys Leu His 135 Arg Ala Ala Trp Trp Gly Lys Val Pro Arg Lys Asp Leu Ile Val Met 150 155 Leu Arg Asp Thr Asp Val Asn Lys Lys Asp Lys Gln Lys Arg Thr Ala 170 Leu His Leu Ala Ser Ala Asn Gly Asn Ser Glu Val Val Lys Leu Leu

185 180 Leu Asp Arg Arg Cys Gln Leu Asn Val Leu Asp Asn Lys Lys Arg Thr 200 205 Ala Leu Ile Lys Ala Val Gln Cys Gln Glu Asp Glu Cys Ala Leu Met 220 215 Leu Leu Glu His Gly Thr Asp Pro Asn Ile Pro Asp Glu Tyr Gly Asn 235 230 Thr Thr Leu His Tyr Ala Ile Tyr Asn Glu Asp Lys Leu Met Ala Lys 250 245 Ala Leu Leu Tyr Gly Ala Asp Ile Glu Ser Lys Asn Lys His Gly 265 Leu Thr Pro Leu Leu Gly Val His Glu Gln Lys Gln Gln Val Val 280 Lys Phe Leu Ile Lys Lys Lys Ala Asn Leu Asn Ala Leu Asp Arg Tyr 300 295 Gly Arg Thr Ala Leu Ile Leu Ala Val Cys Cys Gly Ser Ala Ser Ile 315 310 Val Ser Leu Leu Glu Gln Asn Ile Asp Val Ser Ser Gln Asp Leu 330 325 Ser Gly Gln Thr Ala Arg Glu Tyr Ala Val Ser Ser His His Wal 345 340 Ile Cys Gln Leu Leu Ser Asp Tyr Lys Glu Lys Gln Met Leu Lys Ile 360 365 Ser Ser Glu Asn Ser Asn Pro Glu Asn Val Ser Arg Thr Arg Asn Lys 380 375 Pro Arg Thr His Met Val Val Glu Val Asp Ser Met Pro Ala Ala Ser 395 390 Ser Val Lys Lys Pro Phe Gly Leu Arg Ser Lys Met Gly Lys Trp Cys 410 405 Cys Arg Cys Phe Pro Cys Cys Arg Glu Ser Gly Lys Ser Asn Val Gly 425 Thr Ser Gly Asp His Asp Asp Ser Ala Met Lys Thr Leu Arg Ser Lys 440 435 Met Gly Lys Trp Cys Arg His Cys Phe Pro Cys Cys Arg Gly Ser Gly 455 Lys Ser Asn Val Gly Ala Ser Gly Asp His Asp Asp Ser Ala Met Lys 475 470 Thr Leu Arg Asn Lys Met Gly Lys Trp Cys Cys His Cys Phe Pro Cys 490 485 Cys Arg Gly Ser Gly Lys Ser Lys Val Gly Ala Trp Gly Asp Tyr Asp 505 500 Asp Ser Ala Phe Met Glu Pro Arg Tyr His Val Arg Gly Glu Asp Leu 525 520 Asp Lys Leu His Arg Ala Ala Trp Trp Gly Lys Val Pro Arg Lys Asp 535 Leu Ile Val Met Leu Arg Asp Thr Asp Val Asn Lys Lys Asp Lys Gln 555 Lys Arg Thr Ala Leu His Leu Ala Ser Ala Asn Gly Asn Ser Glu Val 570 565 Val Lys Leu Leu Asp Arg Arg Cys Gln Leu Asn Val Leu Asp Asn 585 Lys Lys Arg Thr Ala Leu Ile Lys Ala Val Gln Cys Gln Glu Asp Glu 600 Cys Ala Leu Met Leu Leu Glu His Gly Thr Asp Pro Asn Ile Pro Asp

Glu Tyr Gly Asn Thr Thr Leu His Tyr Ala Ile Tyr Asn Glu Asp Lys Leu Met Ala Lys Ala Leu Leu Leu Tyr Gly Ala Asp Ile Glu Ser Lys Asn Lys His Gly Leu Thr Pro Leu Leu Gly Val His Glu Gln Lys Gln Gln Val Val Lys Phe Leu Ile Lys Lys Lys Ala Asn Leu Asn Ala Leu Asp Arg Tyr Gly Arg Thr Ala Leu Ile Leu Ala Val Cys Cys Gly Ser Ala Ser Ile Val Ser Leu Leu Glu Gln Asn Ile Asp Val Ser Ser Gln Asp Leu Ser Gly Gln Thr Ala Arg Glu Tyr Ala Val Ser Ser His His His Val Ile Cys Gln Leu Leu Ser Asp Tyr Lys Glu Lys Gln Met Leu Lys Ile Ser Ser Glu Asn Ser Asn Pro Glu Gln Asp Leu Lys Leu Thr Ser Glu Glu Glu Ser Gln Arg Phe Lys Gly Ser Glu Asn Ser Gln Pro Glu Lys Met Ser Gln Glu Pro Glu Ile Asn Lys Asp Gly Asp Arg Glu Val Glu Glu Met Lys Lys His Glu Ser Asn Asn Val Gly Leu Leu Glu Asn Leu Thr Asn Gly Val Thr Ala Gly Asn Gly Asp Asn Gly Leu Ile Pro Gln Arg Lys Ser Arg Thr Pro Glu Asn Gln Gln Phe Pro Asp Asn Glu Ser Glu Glu Tyr His Arg Ile Cys Glu Leu Val Ser Asp Tyr Lys Glu Lys Gln Met Pro Lys Tyr Ser Ser Glu Asn Ser Asn Pro Glu Gln Asp Leu Lys Leu Thr Ser Glu Glu Glu Ser Gln Arg Leu Glu Gly Ser Glu Asn Gly Gln Pro Glu Leu Glu Asn Phe Met Ala Ile Glu Glu Met Lys Lys His Gly Ser Thr His Val Gly Phe Pro Glu Asn Leu Thr Asn Gly Ala Thr Ala Gly Asn Gly Asp Asp Gly Leu Ile Pro Pro Arg Lys Ser Arg Thr Pro Glu Ser Gln Gln Phe Pro Asp Thr Glu Asn Glu Glu Tyr His Ser Asp Glu Gln Asn Asp Thr Gln Lys Gln Phe Cys Glu Glu Gln Asn Thr Gly Ile Leu His Asp Glu Ile Leu Ile His Glu Glu Lys Gln Ile Glu Val Val Glu Lys Met Asn Ser Glu Leu Ser Leu Ser Cys Lys Lys Glu Lys Asp Ile Leu His Glu Asn Ser Thr Leu Arg Glu Glu Ile Ala Met Leu Arg Leu Glu Leu Asp Thr Met Lys His Gln Ser Gln Leu Pro Arg Thr His Met Val Val Glu Val Asp Ser Met

	1045		1050)		1055	
Pro Ala Ala Ser 1060		Lys Lys	Pro Phe 1065	Gly Leu	Arg Ser 107		Met
Gly Lys Trp Cys 1075		1080)		1085		
Ser Asn Val Gly 1090		1095		1100)		
Leu Arg Ser Lys 1105	1110			1115			1120
Arg Gly Ser Gly	1125		1130)		1135	
Ser Ala Met Lys 1140			1145		115	0	
Cys Phe Pro Cys 1155		1160)		1165		
Gly Asp Tyr Asp 1170		1175		1180)		
Gly Glu Asp Leu 1185	1190			1195			1200
Pro Arg Lys Asp	1205		121)		1215	
Lys Asp Lys Gln 1220			1225		123	0	
Asn Ser Glu Val 1235		1240	0		1245		
Val Leu Asp Asn 1250		1255		1260)		
Gln Glu Asp Glu 1265	1270			1275			1280
Asn Ile Pro Asp	1285		129	0		1295	
Asn Glu Asp Lys 1300)		1305		131	0	
Ile Glu Ser Lys 1315		1320	0		1325		
His Glu Gln Lys 1330		1335		1340)		
Asn Leu Asn Ala 1345	1350			1355			1360
Val Cys Cys Gly	1365		137	0		1375	ı
Ile Asp Val Ser 1380		Asp Leu	Ser Gly 1385	Gln Thr			Tyr
					139		
Ala Val Ser Ser 1395	His His	140	Ile Cys O		Leu Ser 1405	Asp	
1395 Lys Glu Lys Gln 1410	His His Met Leu	1400 Lys Ile 1415	Ile Cys O Ser Ser	Glu Asn 1420	Leu Ser 1405 Ser Asn)	Asp Pro	Glu
1395 Lys Glu Lys Gln 1410 Gln Asp Leu Lys 1425	His His Met Leu Leu Thr 1430	1400 Lys Ile 1415 Ser Glu	Ile Cys O Ser Ser Glu Glu	Glu Asn 1420 Ser Gln 1435	Leu Ser 1405 Ser Asn) Arg Phe	Asp Pro Lys	Glu Gly 1440
1395 Lys Glu Lys Gln 1410 Gln Asp Leu Lys	His His Met Leu Leu Thr 1430	1400 Lys Ile 1415 Ser Glu	Ile Cys O Ser Ser Glu Glu	Glu Asn 1420 Ser Gln 1435 Gln Glu	Leu Ser 1405 Ser Asn) Arg Phe	Asp Pro Lys	Glu Gly 1440 Asn
1395 Lys Glu Lys Gln 1410 Gln Asp Leu Lys 1425	His His Met Leu Leu Thr 1430 Gln Pro 1445 Arg Glu	1400 Lys Ile 1415 Ser Glu Glu Lys	Ile Cys Ser Ser Glu Glu Met Ser 145	Glu Asn 1420 Ser Gln 1435 Gln Glu	Leu Ser 1405 Ser Asn) Arg Phe Pro Glu	Asp Pro Lys Ile 1455 Glu	Glu Gly 1440 Asn

1480 1475 Asn Gly Asp Asn Gly Leu Ile Pro Gln Arg Lys Ser Arg Thr Pro Glu 1500 1495 Asn Gln Gln Phe Pro Asp Asn Glu Ser Glu Glu Tyr His Arg Ile Cys 1515 1510 Glu Leu Val Ser Asp Tyr Lys Glu Lys Gln Met Pro Lys Tyr Ser Ser 1525 1530 Glu Asn Ser Asn Pro Glu Gln Asp Leu Lys Leu Thr Ser Glu Glu Glu 1545 1540 Ser Gln Arg Leu Glu Gly Ser Glu Asn Gly Gln Pro Glu Lys Arg Ser 1560 1565 Gln Glu Pro Glu Ile Asn Lys Asp Gly Asp Arg Glu Leu Glu Asn Phe 1575 1580 Met Ala Ile Glu Glu Met Lys Lys His Gly Ser Thr His Val Gly Phe 1590 1595 Pro Glu Asn Leu Thr Asn Gly Ala Thr Ala Gly Asn Gly Asp Asp Gly 1605 1610 Leu Ile Pro Pro Arg Lys Ser Arg Thr Pro Glu Ser Gln Gln Phe Pro 1625 1620 Asp Thr Glu Asn Glu Glu Tyr His Ser Asp Glu Gln Asn Asp Thr Gln 1640 1635 Lys Gln Phe Cys Glu Glu Gln Asn Thr Gly Ile Leu His Asp Glu Ile 1655 1660 Leu Ile His Glu Glu Lys Gln Ile Glu Val Val Glu Lys Met Asn Ser 1675 1670 Glu Leu Ser Leu Ser Cys Lys Lys Glu Lys Asp Ile Leu His Glu Asn 1690 1685 Ser Thr Leu Arg Glu Glu Ile Ala Met Leu Arg Leu Glu Leu Asp Thr 1705 1700 Met Lys His Gln Ser Gln Leu 1715 <210> 379

<210> 379 <211> 656 <212> PRT

<213> Homo sapien

<400> 379

Met Val Val Glu Val Asp Ser Met Pro Ala Ala Ser Ser Val Lys Lys Pro Phe Gly Leu Arg Ser Lys Met Gly Lys Trp Cys Cys Arg Cys Phe 25 Pro Cys Cys Arg Glu Ser Gly Lys Ser Asn Val Gly Thr Ser Gly Asp 40 His Asp Asp Ser Ala Met Lys Thr Leu Arg Ser Lys Met Gly Lys Trp 55 Cys Arg His Cys Phe Pro Cys Cys Arg Gly Ser Gly Lys Ser Asn Val 70 Gly Ala Ser Gly Asp His Asp Asp Ser Ala Met Lys Thr Leu Arg Asn 90 85 Lys Met Gly Lys Trp Cys Cys His Cys Phe Pro Cys Cys Arg Gly Ser 105 Gly Lys Ser Lys Val Gly Ala Trp Gly Asp Tyr Asp Asp Ser Ala Phe 120 115

Met Glu Pro Arg Tyr His Val Arg Gly Glu Asp Leu Asp Lys Leu His 135 Arg Ala Ala Trp Trp Gly Lys Val Pro Arg Lys Asp Leu Ile Val Met 155 150 Leu Arg Asp Thr Asp Val Asn Lys Lys Asp Lys Gln Lys Arg Thr Ala 165 170 Leu His Leu Ala Ser Ala Asn Gly Asn Ser Glu Val Val Lys Leu Leu 185 Leu Asp Arg Arg Cys Gln Leu Asn Val Leu Asp Asn Lys Lys Arg Thr 200 Ala Leu Ile Lys Ala Val Gln Cys Gln Glu Asp Glu Cys Ala Leu Met 215 Leu Leu Glu His Gly Thr Asp Pro Asn Ile Pro Asp Glu Tyr Gly Asn 235 230 Thr Thr Leu His Tyr Ala Ile Tyr Asn Glu Asp Lys Leu Met Ala Lys 250 245 Ala Leu Leu Leu Tyr Gly Ala Asp Ile Glu Ser Lys Asn Lys His Gly 265 260 Leu Thr Pro Leu Leu Gly Val His Glu Gln Lys Gln Gln Val Val 280 Lys Phe Leu Ile Lys Lys Lys Ala Asn Leu Asn Ala Leu Asp Arg Tyr 300 295 Gly Arg Thr Ala Leu Ile Leu Ala Val Cys Cys Gly Ser Ala Ser Ile 315 310 Val Ser Leu Leu Glu Gln Asn Ile Asp Val Ser Ser Gln Asp Leu 330 325 Ser Gly Gln Thr Ala Arg Glu Tyr Ala Val Ser Ser His His Wal 340 345 Ile Cys Gln Leu Leu Ser Asp Tyr Lys Glu Lys Gln Met Leu Lys Ile 360 365 Ser Ser Glu Asn Ser Asn Pro Glu Gln Asp Leu Lys Leu Thr Ser Glu 375 380 Glu Glu Ser Gln Arg Phe Lys Gly Ser Glu Asn Ser Gln Pro Glu Lys 395 Met Ser Gln Glu Pro Glu Ile Asn Lys Asp Gly Asp Arg Glu Val Glu 410 Glu Glu Met Lys Lys His Glu Ser Asn Asn Val Gly Leu Leu Glu Asn 420 Leu Thr Asn Gly Val Thr Ala Gly Asn Gly Asn Gly Leu Ile Pro 445 440 Gln Arg Lys Ser Arg Thr Pro Glu Asn Gln Gln Phe Pro Asp Asn Glu 455 Ser Glu Glu Tyr His Arg Ile Cys Glu Leu Val Ser Asp Tyr Lys Glu 475 470 Lys Gln Met Pro Lys Tyr Ser Ser Glu Asn Ser Asn Pro Glu Gln Asp 490 485 Leu Lys Leu Thr Ser Glu Glu Glu Ser Gln Arg Leu Glu Gly Ser Glu 505 500 Asn Gly Gln Pro Glu Leu Glu Asn Phe Met Ala Ile Glu Glu Met Lys 520 525 Lys His Gly Ser Thr His Val Gly Phe Pro Glu Asn Leu Thr Asn Gly 540 535 Ala Thr Ala Gly Asn Gly Asp Asp Gly Leu Ile Pro Pro Arg Lys Ser 550 555

Arg Thr Pro Glu Ser Gln Gln Phe Prc Asp Thr Glu Asn Glu Glu Tyr 565

His Ser Asp Glu Gln Asn Asp Thr Gln Lys Gln Phe Cys Glu Glu Gln 580

Asn Thr Gly Ile Leu His Asp Glu Ile Leu Ile His Gln 605

Ile Glu Val Val Glu Lys Met Asn Ser Glu Leu Ser Leu Ser Cys Lys 610

Cys Glu Glu Cys Gln 605

Lys Glu Val Val Glu Lys Met Asn Ser Glu Leu Ser Leu Ser Cys Lys 620

Lys Glu Lys Asp Ile Leu His Glu Asn Ser Thr Leu Arg Glu Glu Ile 640

Ala Met Leu Arg Leu Glu Leu Asp Thr Met Lys His Gln Ser Gln Leu 640

<210> 380

<211> 671

<212> PRT

<213> Homo sapien

<400> 380 Met Val Val Glu Val Asp Ser Met Pro Ala Ala Ser Ser Val Lys Pro Phe Gly Leu Arg Ser Lys Met Gly Lys Trp Cys Cys Arg Cys Phe 25 Pro Cys Cys Arg Glu Ser Gly Lys Ser Asn Val Gly Thr Ser Gly Asp His Asp Asp Ser Ala Met Lys Thr Leu Arg Ser Lys Met Gly Lys Trp 5.5 Cys Arg His Cys Phe Pro Cys Cys Arg Gly Ser Gly Lys Ser Asn Val Gly Ala Ser Gly Asp His Asp Asp Ser Ala Met Lys Thr Leu Arg Asn 90 85 Lys Met Gly Lys Trp Cys Cys His Cys Phe Pro Cys Cys Arg Gly Ser 105 Gly Lys Ser Lys Val Gly Ala Trp Gly Asp Tyr Asp Asp Ser Ala Phe 120 Met Glu Pro Arg Tyr His Val Arg Gly Glu Asp Leu Asp Lys Leu His 140 Arg Ala Ala Trp Trp Gly Lys Val Pro Arg Lys Asp Leu Ile Val Met 155 150 Leu Arg Asp Thr Asp Val Asn Lys Lys Asp Lys Gln Lys Arg Thr Ala 170 Leu His Leu Ala Ser Ala Asn Gly Asn Ser Glu Val Val Lys Leu Leu 185 Leu Asp Arg Arg Cys Gln Leu Asn Val Leu Asp Asn Lys Lys Arg Thr 200 Ala Leu Ile Lys Ala Val Gln Cys Gln Glu Asp Glu Cys Ala Leu Met 215 Leu Leu Glu His Gly Thr Asp Pro Asn Ile Pro Asp Glu Tyr Gly Asn 235 230 Thr Thr Leu His Tyr Ala Ile Tyr Asn Glu Asp Lys Leu Met Ala Lys 245 250 Ala Leu Leu Tyr Gly Ala Asp Ile Glu Ser Lys Asn Lys His Gly 265 Leu Thr Pro Leu Leu Gly Val His Glu Gln Lys Gln Gln Val Val

280 275 Lys Phe Leu Ile Lys Lys Lys Ala Asn Leu Asn Ala Leu Asp Arg Tyr 295 300 Gly Arg Thr Ala Leu Ile Leu Ala Val Cys Cys Gly Ser Ala Ser Ile 315 310 Val Ser Leu Leu Glu Gln Asn Ile Asp Val Ser Ser Gln Asp Leu 325 330 Ser Gly Gln Thr Ala Arg Glu Tyr Ala Val Ser Ser His His Wal 345 Ile Cys Gln Leu Leu Ser Asp Tyr Lys Glu Lys Gln Met Leu Lys Ile 360 Ser Ser Glu Asn Ser Asn Pro Glu Gln Asp Leu Lys Leu Thr Ser Glu 380 375 Glu Glu Ser Gln Arg Phe Lys Gly Ser Glu Asn Ser Gln Pro Glu Lys 395 390 Met Ser Gln Glu Pro Glu Ile Asn Lys Asp Gly Asp Arg Glu Val Glu 410 405 Glu Glu Met Lys Lys His Glu Ser Asn Asn Val Gly Leu Leu Glu Asn 425 420 Leu Thr Asn Gly Val Thr Ala Gly Asn Gly Asp Asn Gly Leu Ile Pro 445 440 Gln Arg Lys Ser Arg Thr Pro Glu Asn Gln Gln Phe Pro Asp Asn Glu 455 Ser Glu Glu Tyr His Arg Ile Cys Glu Leu Val Ser Asp Tyr Lys Glu 470 475 Lys Gln Met Pro Lys Tyr Ser Ser Glu Asn Ser Asn Pro Glu Gln Asp 490 485 Leu Lys Leu Thr Ser Glu Glu Glu Ser Gln Arg Leu Glu Gly Ser Glu 505 Asn Gly Gln Pro Glu Lys Arg Ser Gln Glu Pro Glu Ile Asn Lys Asp 520 Gly Asp Arg Glu Leu Glu Asn Phe Met Ala Ile Glu Glu Met Lys Lys 540 535 His Gly Ser Thr His Val Gly Phe Pro Glu Asn Leu Thr Asn Gly Ala 550 555 Thr Ala Gly Asn Gly Asp Asp Gly Leu Ile Pro Pro Arg Lys Ser Arg 570 565 Thr Pro Glu Ser Gln Gln Phe Pro Asp Thr Glu Asn Glu Glu Tyr His 585 Ser Asp Glu Gln Asn Asp Thr Gln Lys Gln Phe Cys Glu Glu Gln Asn 600 Thr Gly Ile Leu His Asp Glu Ile Leu Ile His Glu Glu Lys Gln Ile 615 Glu Val Val Glu Lys Met Asn Ser Glu Leu Ser Leu Ser Cys Lys Lys 635 630 Glu Lys Asp Ile Leu His Glu Asn Ser Thr Leu Arg Glu Glu Ile Ala 650 645 Met Leu Arg Leu Glu Leu Asp Thr Met Lys His Gln Ser Gln Leu 665

<210> 381

<211> 251

<212> DNA

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<210> 382						

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<400> 382

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<211> 154

<212> PRT

<213> Homo sapiens

<400> 383

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35 40 45

Lys Lys Asp Arg Ala Trp Leu Arg Cys Pro Glu Ala Val Ala Gly Phe 50 55 60

Pro Leu Gly Ser Asp Cys Arg Glu Gly Gly Arg Gln Gly Cys Gly Gly 65 70 75 80

Ser Asp Asp Glu Asp Asp Leu Gly Val Ala Pro Gly Leu Ala Pro Ala 85 90 95

Trp Ala Leu Thr Gln Pro Pro Ser Gln Ser Pro Gly Pro Gln Ser Leu 100 105 110

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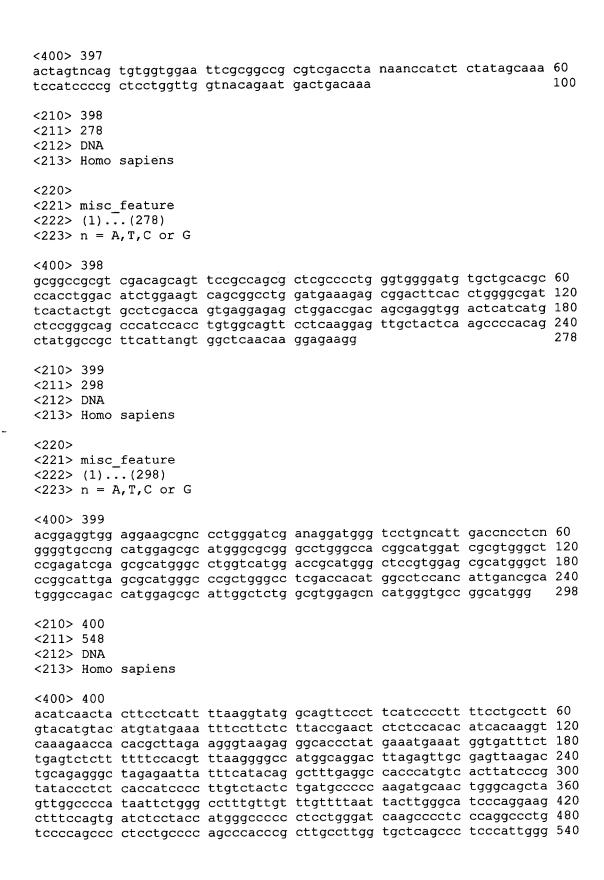
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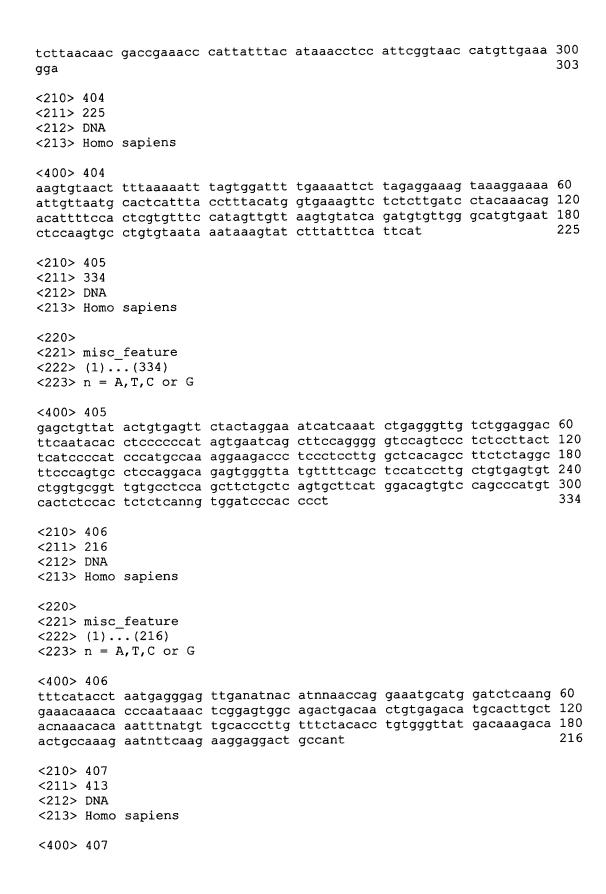
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<212> DNA
<213> Homo sapiens
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tagccagggc actgctgcca acagccagtc cnnataccat catgtnaccc ggtgngctct 180
naanttngat ntccanagec ctacceaten tagttetget eteceaeegg ntaccagece 240
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<210> 392
<211> 277
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<210> 393
<211> 566
<212> DNA
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<400> 393
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<213> Homo sapiens
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<212> DNA
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<400> 396
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gtttagggga gggagtgagg gataaaagaa ggaaaaaaag aagagtgaga aaacctattt 360
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<210> 397
<211> 100
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
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<223> n = A, T, C \text{ or } G
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<210> 402
<211> 407
<212> DNA
<213> Homo sapiens
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<222> (1)...(407)
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<400> 402
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gtacaacatt gcacccagtg tcagattcta cacctggcca ctcaggaagc aagagttaat 180
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<211> 183
<212> DNA
<213> Homo sapiens
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<221> misc_feature
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<223> n = A, T, C or G
<400> 408
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<400> 410
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actgactttg atggctccac aaacataacc cagtgtaaaa acagaagatg tggagggag 180
ctgggagatt tcactgggta cattgaattc ccaaactacc cangcaatta cccagccaac 240
                                                                    241
<210> 413
<211> 231
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(231)
<223> n = A, T, C \text{ or } G
<400> 413
aactcttaca atccaagtga ctcatctgtg tgcttgaatc ctttccactg tctcatctcc 60
ctcatccaag tttctagtac cttctctttg ttgtgaagga taatcaaact gaacaacaaa 120
aagtttactc tecteatttg gaacetaaaa actetettet teetgggtet gagggeteea 180
agaatccttg aatcanttct cagatcattg gggacaccan atcaggaacc t
```

```
<210> 414
<211> 234
<212> DNA
<213> Homo sapiens
<400> 414
actgtccatg aagcactgag cagaagctgg aggcacaacg caccagacac tcacagcaag 60
gatggagctg aaaacataac ccactctgtc ctggaggcac tgggaagcct agagaaggct 120
gtgagccaag gagggagggt cttcctttgg catgggatgg ggatgaagta aggagaggga 180
ctggaccccc tggaagctga ttcactatgg ggggaggtgt attgaagtcc tcca
<210> 415
<211> 217
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)...(217)
<223> n = A, T, C or G
<400> 415
gcataggatt aagactgagt atcttttcta cattcttta actttctaag gggcacttct 60
caaaacacag accaggtagc aaatctccac tgctctaagg ntctcaccac cactttctca 120
cacctagcaa tagtagaatt cagtcctact tctgaggcca gaagaatggt tcagaaaaat 180
                                                                    217
antggattat aaaaaataac aattaagaaa aataatc
<210> 416
<211> 213
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)...(213)
<223> n = A, T, C or G
<400> 416
atgcatatnt aaagganact gcctcgcttt tagaagacat ctggnctgct ctctgcatga 60
ggcacagcag taaagctctt tgattcccag aatcaagaac tctccccttc agactattac 120
cgaatgcaag gtggttaatt gaaggccact aattgatgct caaatagaag gatattgact 180
                                                                    213
atattggaac agatggagtc tctactacaa aag
<210> 417
<211> 303
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)...(303)
<223> n = A, T, C or G
```

```
<400> 417
nagtottoag goccatoagg gaagttoaca otggagagaa gtoatacata tgtactgtat 60
gtgggaaagg ctttactctg agttcaaatc ttcaagccca tcagagagtc cacactggag 120
agaagccata caaatgcaat gagtgtggga agagcttcag gagggattcc cattatcaag 180
ttcatctagt ggtccacaca ggagagaaac cctataaatg tgagatatgt gggaagggct 240
tcantcaaag ttcgtatctt caaatccatc ngaaggncca cagtatanan aaacctttta 300
agt
<210> 418
<211> 328
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(328)
<223> n = A, T, C or G
<400> 418
tttttggcgg tggtggggca gggacgggac angagtctca ctctgttgcc caggctggag 60
tgcacaggca tgatctcggc tcactacaac ccctgcctcc catgtccaag cgattcttgt 120
gcctcagcct tccctgtagc tagaattaca ggcacatgcc accacaccca gctagttttt 180
gtatttttag tagagacagg gtttcaccat gttggccagg ctggtctcaa actcctnacc 240
tcagnggtca ggctggtctc aaactcctga cctcaagtga tctgcccacc tcagcctccc 300
aaagtgctan gattacaggc cgtgagcc
<210> 419
<211> 389
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(389)
<223> n = A, T, C or G
<400> 419
cctcctcaag acggcctgtg gtccgcctcc cggcaaccaa gaagcctgca gtgccatatg 60
accectgage catggactgg agectgaaag geagegtaea eeetgeteet gatettgetg 120
cttgtttcct ctctgtggct ccattcatag cacagttgtt gcactgaggc ttgtgcaggc 180
cgagcaaggc caagctggct caaagagcaa ccagtcaact ctgccacggt gtgccaggca 240
ccggttctcc agccaccaac ctcactcgct cccgcaaatg gcacatcagt tcttctaccc 300
taaaggtagg accaaagggc atctgctttt ctgaagtcct ctgctctatc agccatcacg 360
                                                                   389
tggcagccac tcnggctgtg tcgacgcgg
<210> 420
<211> 408
<212> DNA
<213> Homo sapiens
<400> 420
gttcctccta actcctgcca gaaacagctc tcctcaacat gagagctgca cccctcctcc 60
tggccagggc agcaagcctt agccttggct tcttgtttct gcttttttc tggctagacc 120
gaagtgtact agccaaggag ttgaagtttg tgactttggt gtttcggcat ggagaccgaa 180
```

```
gtcccattga cacctttccc actgacccca taaaggaatc ctcatggcca caaggatttg 240
gccaactcac ccagctgggc atggagcagc attatgaact tggagagtat ataagaaaga 300
gatatagaaa attettgaat gagteetata aacatgaaca ggtttatatt egaageacag 360
acgttgaccg gactttgatg aagtgctatg acaaacctgg caagcccg
<210> 421
<211> 352
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(352)
<223> n = A, T, C or G
<400> 421
gctcaaaaat ctttttactg atnggcatgg ctacacaatc attgactatt acggaggcca 60
gaggagaatg aggcctggcc tgggagccct gtgcctacta naagcacatt agattatcca 120
ttcactgaca gaacaggtct tttttgggtc cttcttctcc accacnatat acttgcagtc 180
ctccttcttg aagattcttt ggcagttgtc tttgtcataa cccacaggtg tagaaacaag 240
ggtgcaacat gaaatttctg tttcgtagca agtgcatgtc tcacaagttg gcangtctgc 300
cactccgagt ttattgggtg tttgtttcct ttgagatcca tgcatttcct gg
<210> 422
<211> 337
<212> DNA
<213> Homo sapiens
<400> 422
atgccaccat gctggcaatg cagcgggcgg tcgaaggcct gcatatccag cccaagctgg 60
cgatgatcga cggcaaccgt tgcccgaagt tgccgatgcc agccgaagcg gtggtcaagg 120
gcgatagcaa ggtgccggcg atcgcggcgg cgtcaatcct ggccaaggtc agccgtgatc 180
gtgaaatggc agctgtcgaa ttgatctacc cgggttatgg catcggcggg cataagggct 240
atccgacacc ggtgcacctg gaagccttgc agcggctggg gccgacgccg attcaccgac 300
gcttcttccg ccggtacggc tggcctatga aaattat
<210> 423
<211> 310
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(310)
\langle 223 \rangle n = A,T,C or G
<400> 423
gctcaaaaat ctttttactg atatggcatg gctacacaat cattgactat tagaggccag 60
aggagaatga ggcctggcct gggagccctg tgcctactan aagcncatta gattatccat 120
tcactgacag aacaggtctt ttttgggtcc ttcttctcca ccacgatata cttgcagtcc 180
tccttcttga agattctttg gcagttgtct ttgtcataac ccacaggtgt anaaacaagg 240
gtgcaacatg aaatttctgt ttcgtagcaa gtgcatgtct cacagttgtc aagtctgccc 300
                                                                   310
tccgagttta
```

```
<210> 424
<211> 370
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)...(370)
<223> n = A, T, C or G
<400> 424
gctcaaaaat ctttttactg ataggcatgg ctacacaatc attgactatt agaggccaga 60
ggagaatgag gcctggcctg ggagccctgt gcctactaga agcacattag attatccatt 120
cactgacaga acaggtettt tttgggteet tetteteeae cacgatatae ttgcagteet 180
ccttcttgaa gattctttgg cagttgtctt tgtcataacc cacaggtgta gaaacatcct 240
ggttgaatct cctggaactc cctcattagg tatgaaatag catgatgcat tgcataaagt 300
cacgaaggtg gcaaagatca caacgctgcc cagganaaca ttcattgtga taagcaggac 360
tccgtcgacg
<210> 425
<211> 216
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(216)
<223> n = A, T, C or G
<400> 425
taacaacnca acatcaaggn aaananaaca ggaatggntg actntgcata aatnggccga 120
anattatcca ttatnttaag ggttgacttc aggntacagc acacagacaa acatgcccag 180
gaggntntca ggaccgctcg atgtnttntg aggagg
<210> 426
<211> 596
<212> DNA
<213> Homo sapiens
<400> 426
cttccagtga ggataaccct gttgccccgg gccgaggttc tccattaggc tctgattgat 60
tggcagtcag tgatggaagg gtgttctgat cattccgact gccccaaggg tcgctggcca 120
gctctctgtt ttgctgagtt ggcagtagga cctaatttgt taattaagag tagatggtga 180
gctgtccttg tattttgatt aacctaatgg ccttcccagc acgactcgga ttcagctgga 240
gacatcacgg caacttttaa tgaaatgatt tgaagggcca ttaagaggca cttcccgtta 300
ttaggcagtt catctgcact gataacttct tggcagctga gctggtcgga gctgtggccc 360
aaacgcacac ttggcttttg gttttgagat acaactctta atcttttagt catgcttgag 420
ggtggatggc cttttcagct ttaacccaat ttgcactgcc ttggaagtgt agccaggaga 480
atacactcat atactcgtgg gcttagaggc cacagcagat gtcattggtc tactgcctga 540
gtcccgctgg tcccatccca ggaccttcca tcggcgagta cctgggagcc cgtgct
<210> 427
<211> 107
```

```
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)...(107)
<223> n = A, T, C or G
<400> 427
gaagaattca agttaggttt attcaaaggg cttacngaga atcctanacc caggncccag 60
cccgggagca gccttanaga gctcctgttt gactgcccgg ctcagng
<210> 428
<211> 38
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(38)
<223> n = A, T, C or G
<400> 428
                                                                    38
gaacttccna anaangactt tattcactat tttacatt
<210> 429
<211> 544
<212> DNA
<213> Homo sapiens
<400> 429
ctttgctgga cggaataaaa gtggacgcaa gcatgacctc ctgatgaggg cgctgcattt 60
attgaagagc ggctgcagcc ctgcggttca gattaaaatc cgagaattgt atagacgccg 120
atatccacga actettgaag gactttetga tttatccaca atcaaatcat eggtttteag 180
tttggatggt ggctcatcac ctgtagaacc tgacttggcc gtggctggaa tccactcgtt 240
gccttccact tcagttacac ctcactcacc atcctctcct gttggttctg tgctgcttca 300
agatactaag cccacatttg agatgcagca gccatctccc ccaattcctc ctgtccatcc 360
tgatgtgcag ttaaaaaatc tgccctttta tgatgtcctt gatgttctca tcaagcccac 420
gagtttagtt caaagcagta ttcagcgatt tcaagagaag ttttttattt ttgctttgac 480
acctcaacaa gttagagaga tatgcatatc cagggatttt ttgccaggtg gtaggagaga 540
ttat
<210> 430
<211> 507
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)...(507)
<223> n = A, T, C or G
<400> 430
cttatcncaa tggggctccc aaacttggct gtgcagtgga aactccgggg gaattttgaa 60
```

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gaacactgac acccatcttc caccccgaca ctctgattta attgggctgc agtgagaaca 120
gagcatcaat ttaaaaagct gcccagaatg ttntcctggg cagcgttgtg atctttgccn 180
cettegtgae tttatgcaat geatcatget attteatace taatgaggga gtteeaggag 240
attcaaccag gatgtttcta cncctgtggg ttatgacaaa gacaactgcc aaagaatntt 300
caagaaggag gactgcaagt atatcgtggt ggagaagaag gacccaaaaa agacctgttc 360
tgtcagtgaa tggataatct aatgtgcttc tagtaggcac agggctccca ggccaggcct 420
catteteete tggeetetaa tagteaatga ttgtgtagee atgeetatea gtaaaaagat 480
                                                                   507
ttttgagcaa aaaaaaaaa aaaaaaa
<210> 431
<211> 392
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)...(392)
<223> n = A,T,C or G
<400> 431
gaaaattcag aatggataaa aacaaatgaa gtacaaaata tttcagattt acatagcgat 60
aaacaagaaa gcacttatca ggaggactta caaatggaag tacactctan aaccatcatc 120
tatcatggct aaatgtgaga ttagcacagc tgtattattt gtacattgca aacacctaga 180
aagagatggg aaacaaaatc ccaggagttt tgtgtgtgga gtcctgggtt ttccaacaga 240
catcattcca gcattctgag attagggnga ttggggatca ttctggagtt ggaatgttca 300
acaaaagtga tgttgttagg taaaatgtac aacttctgga tctatgcaga cattgaaggt 360
                                                                   392
gcaatgagtc tggcttttac tctgctgttt ct
<210> 432
<211> 387
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)...(387)
<223> n = A, T, C or G
<400> 432
ggtatccnta cataatcaaa tatagctgta gtacatgttt tcattggngt agattaccac 60
aaatgcaagg caacatgtgt agatctcttg tcttattctt ttgtctataa tactgtattg 120
ngtagtccaa gctctcggna gtccagccac tgngaaacat gctcccttta gattaacctc 180
gtggacnctn ttgttgnatt gtctgaactg tagngccctg tattttgctt ctgtctgnga 240
attctgttgc ttctggggca tttccttgng atgcagagga ccaccacaca gatgacagca 300
atctgaattg ntccaatcac agctgcgatt aagacatact gaaatcgtac aggaccggga 360
                                                                    387
acaacqtata gaacactgga gtccttt
<210> 433
<211> 281
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
```

```
<222> (1)...(281)
 <223> n = A, T, C or G
 <400> 433
 ttcaactagc anagaanact gcttcagggn gtgtaaaatg aaaggcttcc acgcagttat 60
 ctgattaaag aacactaaga gagggacaag gctagaagcc gcaggatgtc tacactatag 120
 caggenetat ttgggttgge tggaggaget gtggaaaaca tggagagatt ggegetggag 180
 ategeegtgg ctatteeten ttgntattae accagngagg ntetetgtnt geeeactggt 240
 tnnaaaaccg ntatacaata atgatagaat aggacacaca t
 <210> 434
 <211> 484
 <212> DNA
 <213> Homo sapiens
 <400> 434
 ttttaaaata agcatttagt gctcagtccc tactgagtac tctttctctc ccctcctctg 60
 aatttaattc tttcaacttg caatttgcaa ggattacaca tttcactgtg atgtatattg 120
 tgttgcaaaa aaaaaaagt gtctttgttt aaaattactt ggtttgtgaa tccatcttgc 180
 tttttcccca ttggaactag tcattaaccc atctctgaac tggtagaaaa acatctgaag 240
 agctagtcta tcagcatctg acaggtgaat tggatggttc tcagaaccat ttcacccaga 300
 cageetgttt etateetgtt taataaatta gtttgggtte tetacatgea taacaaacce 360
 tgctccaatc tgtcacataa aagtctgtga cttgaagttt agtcagcacc cccaccaaac 420
tttatttttc tatgtgtttt ttgcaacata tgagtgtttt gaaaataaag tacccatgtc 480
ttta
                                                                    484
<210> 435
<211> 424
<212> DNA
<213> Homo sapiens
<400> 435
gcgccgctca gagcaggtca ctttctgcct tccacgtcct ccttcaagga agccccatgt 60
gggtagcttt caatategea ggttettaet eetetgeete tataagetea aacceaceaa 120
cgatcgggca agtaaacccc ctccctcgcc gacttcggaa ctggcgagag ttcagcgcag 180
atgggcctgt ggggagggg caagatagat gagggggagc ggcatggtgc ggggtgaccc 240
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ggtagagacc tttgggggtc tggaacctct ggactcccca tgctctaact cccacactct 360
gctatcagaa acttaaactt gaggattttc tctgtttttc actcgcaata aattcagagc 420
aaac
                                                                   424
<210> 436
<211> 667
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(667)
<223> n = A, T, C or G
<400> 436
accttgggaa nactctcaca atataaaggg tcgtagactt tactccaaat tccaaaaagg 60
tcctggccat gtaatcctga aagttttccc aaggtagcta taaaatcctt ataagggtgc 120
```

```
agectettet ggaatteete tgattteaaa gteteaetet caagttettg aaaacgaggg 180
caqttcctga aaggcaggta tagcaactga tcttcagaaa gaggaactgt gtgcaccggg 240
atgggctgcc agagtaggat aggattccag atgctgacac cttctggggg aaacagggct 300
qccaqqtttq tcataqcact catcaaagtc cggtcaacgt ctgtgcttcg aatataaacc 360
tgttcatgtt tataggactc attcaagaat tttctatatc tctttcttat atactctcca 420
agttcataat gctgctccat gcccagctgg gtgagttggc caaatccttg tggccatgag 480
gattccttta tggggtcagt gggaaaggtg tcaatgggac ttcggtctcc atgccgaaac 540
accaaagtca caaacttcaa ctccttggct agtacacttc ggtctagcca gaaaaaaagc 600
agaaacaaga agccaaggct aaggcttgct gccctgccag gaggaggggt gcagctctca 660
                                                                   667
tgttgag
<210> 437
<211> 693
<212> DNA
<213> Homo sapiens
<400> 437
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taaagctcag gttaggaggc tgataagctt ggaaggaact tcagacagct ttttcagatc 180
ataaaagata attettagee catgttette teeagageag acetgaaatg acageacage 240
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gccatgggag aaagcagctc tctggatgtt tgtacagatc atggactatt ctctgtggac 360
cattleteca ggttacecta ggtgteacta ttggggggae agecageate tttagettte 420
atttgagttt ctgtctgtct tcagtagagg aaacttttgc tcttcacact tcacatctga 480
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taaggacatg ttgcttcaga gatgtctgta actatctggg ggctctgttg gctctttacc 660
                                                                   693
ctgcatcatg tgctctcttg gctgaaaatg acc
<210> 438
<211> 360
<212> DNA
<213> Homo sapiens
<400> 438
ctgcttatca caatqaatgt tctcctgggc agcgttgtga tctttgccac cttcgtgact 60
ttatgcaatg catcatgcta tttcatacct aatgagggag ttccaggaga ttcaaccagg 120
atgtttctac acctgtgggt tatgacaaag acaactgcca aagaatcttc aagaaggagg 180
actgcaagta tatctggtgg agaagaagga cccaaaaaag acctgttctg tcagtgaatg 240
gataatctaa tgtgcttcta gtaggcacag ggctcccagg ccaggcctca ttctcctctg 300
gcctctaata gtcaataatt gtgtagccat gcctatcagt aaaaagattt ttgagcaaac 360
<210> 439
<211> 431
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)...(431)
<223> n = A, T, C or G
<400> 439
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tggccagggc agcaagcctt agccttggct tcttgtttct gctttttttc tggctagacc 120
gaagtgtact agccaaggag ttgaagtttg tgactttggt gtttcggcat ggagaccgaa 180
gtcccattga cacctttccc actgacccca taaaggaatc ctcatggcca caaggatttg 240
gccaactcac ccagctgggc atggagcagc attatgaact tggagagtat ataagaaaga 300
gatatagaaa attottgaat gagtootata aacatgaaca ggtttatatt cgaagcacag 360
acgttgaccg gactttgatg agtgctatga caaacctggc agcccgtcga cgcggccgcg 420
                                                                   431
aatttagtag t
<210> 440
<211> 523
<212> DNA
<213> Homo sapiens
<400> 440
agagataaag cttaggtcaa agttcataga gttcccatga actatatgac tggccacaca 60
ggatcttttg tatttaagga ttctgagatt ttgcttgagc aggattagat aaggctgttc 120
tttaaatgtc tgaaatggaa cagatttcaa aaaaaaaccc cacaatctag ggtgggaaca 180
aggaaggaaa gatgtgaata ggctgatggg caaaaaacca atttacccat cagttccagc 240
cttctctcaa ggagaggcaa agaaaggaga tacagtggag acatctggaa agttttctcc 300
actggaaaac tgctactatc tgtttttata tttctgttaa aatatatgag gctacagaac 360
taaaaattaa aacctctttg tgtcccttgg tcctggaaca tttatgttcc ttttaaagaa 420
acaaaaatca aactttacag aaagatttga tgtatgtaat acatatagca gctcttgaag 480
tatatatatc atagcaaata agtcatctga tgagaacaag cta
                                                                   523
<210> 441
<211> 430
<212> DNA
<213> Homo sapiens
<400> 441
gttcctccta actcctgcca gaaacagctc tcctcaacat gagagctgca cccctcctcc 60
tggccagggc agcaagcctt agccttggct tcttgtttct gcttttttc tggctagacc 120
gaagtgtact agccaaggag ttgaagtttg tgactttggt gtttcggcat ggagaccgaa 180
gtcccattga cacctttccc actgacccca taaaggaatc ctcatggcca caaggatttg 240
gccaactcac ccagctgggc atggagcagc attatgaact tggagagtat ataagaaaga 300
gatatagaaa attottgaat gagtootata aacatgaaca ggtttatatt cgaagcacag 360
acgttgaccg gactttgatg agtgctatga caaacctggc agcccgtcga cgcggccgcg 420
aatttagtag
<210> 442
<211> 362
<212> DNA
<213> Homo sapiens
<400> 442
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tttcctggaa tgacaattat attttaactt tggtggggga aagagttata ggaccacagt 120
cttcacttct gatacttgta aattaatctt ttattgcact tgttttgacc attaagctat 180
atgtttagaa atggtcattt tacggaaaaa ttagaaaaat tctgataata gtgcagaata 240
aatgaattaa tgttttactt aatttatatt gaactgtcaa tgacaaataa aaattctttt 300
tgattatttt ttgttttcat ttaccagaat aaaaactaag aattaaaagt ttgattacag 360
                                                                   362
tc
```

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The first was the first to the
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<210> 443
<211> 624
<212> DNA
<213> Homo sapiens
<220>
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<222> (1) ... (624)
<223> n = A,T,C \text{ or } G
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 ttgaaagaat taaattcaga ggaggggaga gaaagagtac tcagtaggga ctgagcacta 120
 aatgettatt ttaaaagaaa tgtaaagage agaaageaat teaggetace etgeettttg 180
 tgctggctag tactccggtc ggtgtcagca gcacgtggca ttgaacattg caatgtggag 240
 cccaaaccac agaaaatggg gtgaaattgg ccaactttct attaacttgg cttcctgttt 300
 tataaaatat tgtgaataat atcacctact tcaaagggca gttatgaggc ttaaatgaac 360
  taacgcctac aaaacactta aacatagata acataggtgc aagtactatg tatctggtac 420
  atggtaaaca teettattat taaagteaac getaaaatga atgtgtgtgc atatgetaat 480
  agtacagaga gagggcactt aaaccaacta agggcctgga gggaaggttt cctggaaaga 540
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   <211> 425
   <212> DNA
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    <220>
    <221> misc_feature
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    gaagetttgt ccaggeetgt gtgtgaacce aatgttttge ttagaaatag aacaagtaag 120
     ttcattgcta tagcataaca caaaatttgc ataagtggtg gtcagcaaat ccttgaatgc 180
     tgcttaatgt gagaggttgg taaaatcctt tgtgcaacac tctaactccc tgaatgtttt 240
     gctgtgctgg gacctgtgca tgccagacaa ggccaagctg gctgaaagag caaccagcca 300
     cctctgcaat ctgccacctc ctgctggcag gatttgttt tgcatcctgt gaagagccaa 360
     ggaggcacca gggcataagt gagtagactt atggtcgacg cggccgcgaa tttagtagta 420
      gtaga
      <210> 445
      <211> 414
      <212> DNA
      <213> Homo sapiens
       <220>
       <221> misc_feature
       <222> (1) ... (414)
       <223> n = A, T, C \text{ or } G
       <400> 445
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         tgaaattett tgcatgtggc agattattgg atgtagttte etttaactag catataaate 180
         tggtgtgttt cagataaatg aacagcaaaa tgtggtggaa ttaccatttg gaacattgtg 240
         aatgaaaaat tgtgtctcta gattatgtaa caaataacta tttcctaacc attgatcttt 300
         ggatttttat aatcctactc acaaatgact aggcttctcc tcttgtattt tgaagcagtg 360
         tgggtgctgg attgataaaa aaaaaaaaag tcgacgcggc cgcgaattta gtag
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        <211> 631
        <212> DNA
        <213> Homo sapiens
       <220>
       <221> misc_feature
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       <223> n = A, T, C \text{ or } G
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     atgctggtta tactggacaa cactgtgaaa aaaaggacta cagtgttcta tacgttgttc 180
     ccggtcctgt acgatttcag tatgtcttaa tcgcagctgt gattggaaca attcagattg 240
     ctgtcatctg tgtggtggtc ctctgcatca caagggccaa actttaggta atagcattgg 300
     actgagattt gtaaactttc caaccttcca ggaaatgccc cagaagcaac agaattcaca 360
     gacagaagca aaatacaggg cactacagtt cagacaatac aacaagagcg tccacgaggt 420
     taatctaaag ggagcatgtt tcacagtggc tggactaccg agagcttgga ctacacaata 480
    Cagtattata gacaaaagaa taagacaaga gatctacaca tgttgccttg catttgtggt 540
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    aatagtatac attgtcttga tgttttttct g
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    <211> 585
   <212> DNA
   <213> Homo sapiens
   <220>
   <221> misc_feature
  <222> (1) ... (585)
  \langle 223 \rangle n = A, T, C or G
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 gcctcttctg gaattcctct gatttcaaag tctcactctc aagttcttga aaacgagggc 180
 agttcctgaa aggcaggtat agcaactgat cttcagaaag aggaactgtg tgcaccggga 240
 tgggctgcca gagtaggata ggattccaga tgctgacacc ttctggggga aacagggctg 300
ccaggtttgt catagcactc atcaaagtcc ggtcaacgtc tgtgcttcga atataaacct 360
gttcatgttt ataggactca ttcaagaatt ttctatatct ctttcttata tactctccaa 420
gttcataatg ctgctccatg cccagctggg tgagttggcc aaatccttgt ggccatgagg 480
attectttat ggggtcagtg ggaaaggtgt caatgggaet teggteteca tgeegaaaca 540
ccaaagtcac aaacttcaac teettggeta gtacaetteg gteta
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<211> 93
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    <213> Homo sapiens
    <220>
    <221> misc_feature
    <222> (1)...(93)
    <223> n = A,T,C or G
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   ggctccctag tgccctggag agganggggc tag
   <210> 449
   <211> 706
   <212> DNA
   <213> Homo sapiens
  <220>
  <221> misc_feature
  <222> (1)...(706)
  <223> n = A, T, C or G
  <400> 449
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  cctggagagg aggtgtctag tcagagagta gtcctggaag gtggcctctg ngaggagcca 180
  cggggacagc atcctgcaga tggtcgggcg cgtcccattc gccattcagg ctgcgcaact 240
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 cgtacgtaag cttggatcct ctagagcggc cgcctactac tactaaattc gcggccgcgt 480
 cgacgtggga tccncactga gagagtggag agtgacatgt gctggacnct gtccatgaag 540
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 <211> 493
 <212> DNA
 <213> Homo sapiens
<400> 450
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caagtcaggt agtgaaatgg gtggaattaa actcaaatta atcctgccag ctgaaacgca 300
agagacactg tcagagagtt aaaaagtgag ttctatccat gaggtgattc cacagtcttc 360
tcaagtcaac acatctgtga actcacagac caagttctta aaccactgtt caaactctgc 420
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gcgaatttag tag
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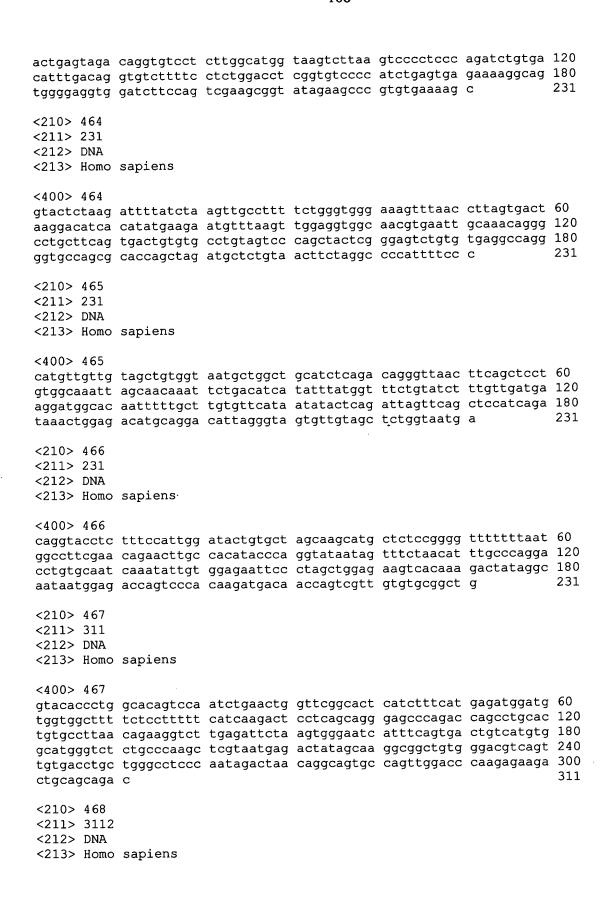
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   <212> DNA
   <213> Homo sapiens
   <220>
   <221> misc_feature
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   <223> n = A, T, C or G
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   ctcttcgcta ttacgccagc tggcgaaagg gggatgtgct gcaaggcgat taagttgggt 120
   aacgccaggg ttttcccagt cncgacgttg taaaacgacg gccagtgaat tgaatttagg 180
   tgacnctata gaagagctat gacgtcgcat gcacqcgtac gtaagcttgg atcctctaga 240
   geggeegeet actactacta aattegegge egegtegaeg tgggateene actgagagag 300
   tggagagtga catgtgctgg acnctgtcca tgaagcactg agcagaagct ggaggcacaa 360
   cgcnccagac actcacagct actcaggagg ctgagaacag gttgaacctg ggaggtggag 420
   gttgcaatga gctgagatca ggccnctgcn ccccagcatg gatgacagag tgaaactcca 480
   tcttaaaaaa aaaaaaaaa a
                                                                       501
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  <211> 51
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  <213> Homo sapiens
  <220>
- . <221> misc feature
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                                                                      51
  <210> 453
  <211> 317
  <212> DNA
  <213> Homo sapiens
  <220>
  <221> misc feature
  <222> (1)...(317)
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  <400> 453
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  acatctgaag agctagtcta tcagcatctg gcaagtgaat tggatggttc tcagaaccat 120
  ttcacccana cagcctgttt ctatcctgtt taataaatta gtttgggttc tctacatgca 180
  taacaaaccc tgctccaatc tgtcacataa aagtctgtga cttgaagttt antcagcacc 240
  cccaccaaac tttattttc tatgtgtttt ttgcaacata tgagtgtttt gaaaataagg 300
  tacccatgtc tttatta
                                                                      317
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  <211> 231
  <212> DNA
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 agaagaccaa attettetge atcccagett gcaaacaaaa ttgttettet aggtetecae 180
 cetteettt teagtgttee aaageteete acaattteat gaacaacage t
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 <212> DNA
 <213> Homo sapiens
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 cattgttccg aatgggcttt ccacaggcta cacacaaa acaggaaaca tgccaagttt 120
 gtttcaacgc attgatgact tctccaagga tcttcctttg gcatcgacca cattcagggg 180
 caaagaattt ctcatagcac agctcacaat acagggctcc tttctcctct a
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 <211> 231
 <212> DNA
 <213> Homo sapiens
 <400> 456
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 ttccattcag tattatcgtt attattcttg gagaaaccct gtctgtttac tgtaaccttt 120
 tgcactcaaa ttcctttatc aggaataact acatagccac tatttacaaa gccattggaa 180
 cctttttatt tggtgcagct gctagtcagt ccctgactga cattgccaag t
 <210> 457
 <211> 231
 <212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(231)
<223> n = A, T, C or G
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gcattcctta atatgatctt gctataatta gatttttctc cattagagtt catacagttt 120
tatttgattt tattagcaat ctctttcaga agacccttga gatcattaag ctttgtatcc 180
agttgtctaa atcgatgcct catttcctct gaggtgtcgc tggcttttgt g
<210> 458
<211> 231
<212> DNA
<213> Homo sapiens
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aggtctggtt cccccactt ccactcccct ctactctctc taggactggg ctgggccaag 60
agaagagggg tggttaggga agccgttgag acctgaagcc ccaccctcta ccttccttca 120
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	cttgggtaac taggcatttt				gaatttccaa t	180 231
<210> 459 <211> 231 <212> DNA <213> Homo	sapiens	·		·		
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<210> 463 <211> 231 <212> DNA <213> Homo	sapiens					
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<212> DNA
<213> Homo sapiens
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tgatttgcca aaattctaaa gcgcactcac catgaaatgg ataaaggtta cctttgggga 180
tttgcactgc atgaattctg tgaaaagctt gttggatatt gtgatagaga tagagaaatg 240
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His His His Thr His Glu His Thr Asp Thr Leu Pro Tyr Gly His Trp 50 55 60

His Thr His Cys His Thr Val Thr Trp Thr His Leu His Thr Ile Thr 65 70 75 80

Pro Pro His Thr Leu Pro Val Asp Thr Arg Thr His Arg His Cys His
85 90 95

Thr Asp Thr Gln Asn Thr Val Thr Arg Arg His His His Ala Asp Thr

Pro Pro Leu Trp Cys Arg Leu Asn Tyr Pro Ala Gly Gly Thr Ala Val 115 120 125

Ala Tyr Ser Cys Leu Ser Asp Trp Leu Ser Pro Gln 130 135 140

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Ser His Gly His Thr Gly Ile Val Thr Trp Thr Asp Thr Gln Thr Tyr 20 25 30

Gly Glu Ile Thr Trp Thr His His His Thr Ile Thr Gly Thr Gln Thr 35 40 45

His Gly Asp Ile Thr Thr Trp Thr His Cys His Thr Thr Thr Gly Thr 50 55 60

Arg Asp Ile Thr Leu Ser His Gly His Thr Ile Thr His Met Asn Thr 65 70 75 80

Pro Thr His Cys His Met Asp Thr Gly Thr His Thr Ala Thr Leu Ser 85 90 95

His Gly His Thr Ser Thr Pro Ser His His His Thr His Cys Leu Trp
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Thr Gln Gly His Thr Asp Thr Val Thr Gln Ile His Lys Thr Leu Ser 115 120 125

His Gly Asp Ile Thr Met Gln Ile His His His Ser Gly Ala Val 130 135 140

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Gly Glu Ile Thr Leu Thr His His His Thr Ile Thr Gly Thr Gln Thr
35 40 45

His Gly Asp Ile Thr Thr Trp Thr His Cys His Thr Thr Thr Gly Thr 50 55 60

Arg Asp Ile Thr Leu Ser His Gly His Thr Ile Thr His Met Asn Thr 65 70 75 80

Pro Thr His Cys His Met Asp Thr Ala Thr His Thr Ala Thr Leu Ser 85 90 95

His Gly His Thr Ser Ile Pro Ser His His His Thr His Cys His Val

110 105 100 Asp Thr Arg Thr His Arg His Cys His Thr Asp Thr Gln Asn Thr Val 120 115 Thr Arg Arg His His His Ala Asp Thr Pro Pro His Gly His Ser Thr 135 Arg His Ser Ala Thr Gln Ile His His His Thr Glu Met Arg Thr His Cys His Thr Asp Thr Thr Thr Ser Leu Pro His Phe His Val Ser Ala 170 Gly Gly Val Gly Pro Thr Thr Leu Gly Ser Asn Arg Glu Ile Thr Trp 185 Thr Tyr Ser Glu Gly Lys Ile Phe Phe Tyr Phe Leu Gly Asn Gln Ala 195 Arg Leu Cys Leu Lys Lys Arg Lys Lys Lys Gln Tyr Thr Val 215 <210> 480 <211> 144 <212> PRT <213> Homo sapiens <400> 480 Met Glu Pro Tyr Arg Gly Asn Glu Gln Pro Ser Gln Glu Gln Gly Val Cys Cys Leu Trp Gly Leu Gln Ser Leu Pro Gln Gly Ser Tyr Val Thr Val Gly Phe Leu Val Val Lys Arg Gln Thr Ile Gly Arg Leu Glu Arg Asp Phe Met Phe Lys Cys Arg Lys Gln Pro Gly Leu Pro Pro Ser Gly Leu Cys Leu Leu Trp Pro Trp Pro Asn Leu Glu Phe Gly Arg Arg Gln Asp Arg Leu Thr Trp Ser Ser Val Ser Val Ala Gly Val Cys Ala Cys Arg Ala Arg Pro Gly Trp Leu Gly Glu Gln Pro Ala Thr Ser Ala Gly 105 Val Arg Leu Glu Gln Val Glu Gln Pro Pro Ala His Pro Leu Gln Glu 120

Ala Gly Val Ala Arg Phe Pro Arg Pro Glu Trp Val Pro Pro Asn Gly 130 135 140

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Pro Pro Thr Leu Pro Ser Gln Gly Ser Gly Trp Pro Cys Ser His Ser 35 40 45

Leu Ser Gly Cys His Leu Met Ala Asp Gly Ala Lys Ala Leu Gly Lys 50 55 60

Ala Asp Gly Pro Trp Pro Tyr Leu Phe Val Arg Arg Thr Asp Val Pro 65 70 75 80

Cys Pro Ala Ala Ser Glu Val Gly Gly Cys Ala Pro Ser Ser Trp Arg 85 90 95

Ala Leu Ala Glu Val Thr Gly Cys Ser Leu Gly Pro Leu Gly Leu Ala 100 105 110

Gln His Ala Gln Ala Ser Val Leu Leu Cys Tyr Lys Trp Ser His 115 120 125

Ile Gly Glu Thr Ser Ser His Leu Arg Ser Lys Val Tyr Ala Ala Phe 130 135 140

Gly Gly Ser Ser Pro Cys Leu Lys Gly Leu Met Ser Leu Trp Ala Ser 145 150 155 160

Trp Leu Ser Arg Gly Arg Pro 165

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Arg	Ala	Ser 35	Trp	Leu	Pro	Gly	Gly 40	Gly	Pro	Gln	Ala	Ile 45	Leu	Gly	Arg
Thr	Leu 50	Cys	Ser	Ser	Ala	Glu 55	Ser	Ser	Gln	Asp	Cys 60	His	Pro	Gly	Gly
Pro 65	Ser	Ile	Ala	Leu	Ala 70	Lys	Pro	Cys	Arg	Gly 75	Val	Trp	Leu	Leu	Phe 80
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Ala	Ser	Gly 115	Gly	Gly	Gly	Pro	Ala 120	Thr	Asn	Leu	Thr	Gln 125	Ser	Arg	Lys
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Leu Ser His Ser
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Lys Tyr Arg Gly
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Leu Met Ile Ser
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Phe Pro Asn Gly
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Gly Ser Ile Val
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ctgtagagtt tttggaatng acctcagtag caatgcaatg agctgggtcc gccaggctcc
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Cys Arg Met Pro Arg Thr Leu Arg Arg Leu
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Phe Leu Thr Phe Ser Phe Leu Ser Met Val Glu Pro Pro Arg Ala Gly
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Val Leu Asn Ser Gln Ala Thr Asp Ser Tyr Gln Ser Thr Asp Tyr Tyr 35 40 45

Glu Pro His His Thr Gly Gly Glu His 50 55

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<213> Homo sapiens

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Leu Gln Lys Asn Lys Leu Arg Ala Ser Thr Asp Ser Thr Leu Trp Ile
5 10 15

Cys Ala Ala Glu Ala Ser Thr Lys Pro Tyr Phe Tyr Thr Cys Leu Val 20 25 30

Met Leu His Gly Gln Gly Leu Ala Leu Leu Ser Pro Thr Asn Leu Pro 35 40 45

Glu Ile Leu Arg Phe Leu Phe Asn Gly Phe Leu
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<210> 555

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<213> Homo sapiens

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Pro Gln Leu Gly Ala Thr Ala Gln Gly Lys Val His Met Gly Leu Ser 20 25 30

Thr Ala Gln Gly Ser Ile Gln Asp Ile Lys Val Pro His Ser Ile Asp 35 40 45

Leu Val Ala Lys Lys Lys Gln Thr Leu Ile Ser Phe Cys His Pro 50 55 60

Ser Asp Pro Leu Glu Leu Leu 65 70

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<211> 81

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<213> Homo sapiens

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Ser Pro Arg Thr Ile Met Asn His Thr Thr Gln Glu Glu Val Ser Thr 20 25 30

Arg Gln Ala Lys Glu Ala Ser Pro Val Leu Thr Ala Thr Arg His Gly
35 40 45

Ser Tyr Tyr Ser Leu Asn Ser Ala Ser Thr Gln Ile Ser Asp Asn Ile 50 55 60

Arg Asn Ser Leu Glu His Glu Pro Cys Cys Glu Leu Pro Ile Arg Arg

80 75 70 65 Ile <210> 557 <211> 54 <212> PRT <213> Homo sapiens <400> 557 Ser Leu Ser Ala Thr Pro Leu Thr Leu Trp Asn Ser Ser Asp Pro Leu Glu Gln Ala Tyr Leu Ile Ser Ala Arg Glu Lys Thr Asn Asn Gly Leu 20 Lys Gly Ser Leu Thr Met Lys Val Ser Ala Asn Ser Trp Leu Arg Cys 40 Gly Phe His Ile Arg Phe 50 <210> 558 <211> 77 <212> PRT <213> Homo sapiens <220> <221> VARIANT <222> (1)...(77) <223> Xaa = Any amino acid <400> 558 Asn Asp Arg Asp Arg Asn Ser Asn Lys Val Ile Xaa Lys Ala Asn Leu Ile Tyr Phe Thr Asn Leu Thr Ser Cys Leu Ser Val Gln Asn Gln Thr Phe Thr Cys Thr Lys Arg His Lys His Leu Gln Cys Ser Ser Val His Leu Cys Lys Ile Pro Pro Arg Leu Lys Gly Arg Asp Lys Lys Lys 50 Pro Ser Tyr Leu Ser Gly Val Leu His Ser Arg Ser Tyr

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<212> PRT <213> Homo sapiens

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Thr Leu Pro Pro Leu Arg Ser Val Ile Thr Leu Glu Thr His Trp Ser 5 10 15

Thr Asn Pro Val Val Asn Cys Leu Ser Glu Gly Ser Arg Leu Cys Ala 20 25 30

Ser Tyr Glu Asn Leu Met Pro Asp Asp Leu Ser Leu Ser His Phe Ala 35 40 45

Pro Arg

<210> 560

<211> 56

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<213> Homo sapiens

<400> 560

Ile Gly Ser Leu Lys Gly Pro Thr Thr Ala Gly Ser His Cys Ser Gly
5 10 15

Glu Gly Ser Tyr Gly Thr Phe Tyr Cys Pro Arg Phe Tyr Thr Gly Tyr
20 25 30

Lys Gly Ala Ser Gln Tyr Arg Ser Gly Ser Lys Glu Glu Glu Thr Asn 35 40 45

Thr Asp Leu Phe Leu Pro Pro Leu
50 55

<210> 561

<211> 57

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<213> Homo sapiens

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<223> Xaa = Any amino acid

<400> 561

Val Leu His Leu Asp Gln Met Asn Asn Val Gly Ile Xaa Met Asp Lys 5 10 15

Gly Leu Lys Ser Pro Glu Ile Lys Asn Pro Ala Pro Thr Gly Thr Ser 20 25 30

Asn Leu Ser Cys Phe Leu Ser Xaa Phe Trp Leu Met Gln Gly Thr Asn

35 40 45

Ser Leu Pro Arg Glu Asn Tyr Leu Asn 50 55

<210> 562

<211> 59

<212> PRT

<213> Homo sapiens

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<222> (1)...(59)

<223> Xaa = Any amino acid

<400> 562

Asp Leu Tyr Pro Xaa Arg Ser Gln His Cys Ser Phe Asp Pro Ser Val 5 10 15

Ala Pro Met His Gly Ile Lys Asn Ser Ile Thr Ser Leu Ile Phe Leu 20 25 30

Ile Ser Tyr Leu Xaa Leu Glu Met Ser Ser Leu Ser Glu Ser Leu Val 35 40 45

Leu Ser Ser Gly Asp Tyr Val Leu Asp Thr Pro 50 55

<210> 563

<211> 79

<212> PRT

<213> Homo sapiens

<400> 563

Cys Phe Leu Phe Pro Tyr Leu Trp Leu Tyr Ala Gln Pro Leu Phe Pro 5 10 15

Lys Gln Gln Pro Pro Ala Leu Ala Pro Gly His Pro Asp Phe Ile His 20 25 30

Thr Gln Asn Glu Gln Ile Asp Pro Ser Pro His Ile Gln Asn Leu Met 35 40 45

Trp Asn Pro His Leu Ser Gln Glu Leu Ala Glu Thr Phe Met Val Arg
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Asp Pro Leu Arg Pro Leu Leu Val Phe Ser Leu Ala Asp Ile Arg 65 70 75

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<212> PRT

<213> Homo sapiens

<400> 564

Ala Cys Ser Lys Gly Ser Glu Glu Phe Gln Arg Val Arg Gly Val Ala
5 10 15

Glu Arg Asp Gln Cys Leu Phe Leu Leu Cys Tyr Gln Ile Tyr Thr 20 25 30

Val Arg His Leu Tyr Ile Leu Tyr Arg Thr Leu Gly Ser Arg Lys Ser 35 40 45

His Met Asn Leu Pro Leu Ser Ser Gly Ser Gln Leu Trp Leu Ala Pro 50 55 60

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<213> Homo sapiens

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<222> (1)...(57)

<223> Xaa = Any amino acid

<400> 565

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5 10 15

Ala Val Cys Cys Gly Ser Ala Ser Ile Val Ser Leu Leu Leu Glu Gln
20 25 30

Asn Ile Asp Val Ser Ser Gln Asp Leu Ser Gly Gln Thr Ala Arg Glu 35 40 45

Tyr Ala Val Ser Ser Xaa His Asn Val

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<213> Homo sapiens

<400> 566

Ile Leu Leu Glu Phe Phe Arg Asn Gln Arg Gly Ser Leu Asn Pro Arg
5 10 15

Lys Thr Val Pro Phe Ile Lys Ser Glu Gly Glu Lys Lys Gly His

Cys Asn His Ser Val Val Ser Ile Asp Ser Ala Ala Ala Leu Leu Pro

35 40 45

Leu Lys Leu Val Leu Leu Pro 50 55

<210> 567

<211> 51

<212> PRT

<213> Homo sapiens

<400> 567

Tyr Ser Asp Phe Asp Val Phe Cys Ser His Thr Tyr Gly Tyr Met Leu
5 10 15

Ser His Cys Ser Gln Ser Ser Ser Pro Leu Leu Trp Pro Leu Gly Ile 20 25 30

Leu Thr Leu Ser Thr His Lys Met Ser Lys Leu Thr Leu Pro Pro Ile 35 40 45

Phe Arg Thr 50

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<211> 75

<212> PRT

<213> Homo sapiens

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Lys Val Gly Glu Tyr Ile Leu Gln Ser Leu Leu Arg Ile Arg Lys Ile 5 10 15

Tyr Val Ala Phe Asn Ser Val Pro Ser Thr Cys Leu Leu Ala Ser Leu 20 25 30

Thr Glu Thr Pro Val Thr Thr Ile Leu Thr Ile Ile Ile Asn Leu Thr 35 40 45

Cys Phe Gln His Ala Glu Ser Ser Tyr Leu Phe Tyr Pro Leu Ala Asp 50 55 60

Phe Leu Leu Gln His Ile Ser Leu Gly Lys Leu 65 70 75

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<213> Homo sapiens

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Lys Cys Trp Gly Tyr Arg His Lys Pro Pro His Pro Ala Cys His Ile 115 120 125

Leu Leu Asn Tyr 130

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His Gly Gly Arg Arg Gly Ser Lys Ala Arg Leu Thr Trp Trp Gln
20 25 30

Glu Arg Thr Ser Glu Gly Gly Asp Cys His Lys Leu Phe Phe Glu 35 40 45

Thr Arg Val Trp Pro Cys Cys Pro Gly Trp Ser Ala Val Ala 50 55 60

<210> 575

<211> 76

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Trp Arg Ala Pro Val Ile Pro Gly Thr Arg Glu Ala Glu Gly Gly Glu 20 25 30

Ser Leu Glu Pro Gly Arg Leu Arg Glu Glu Asn Arg Leu Asn Pro Gly 35 40 45

Gly Arg Gly Cys Ser Glu Pro Arg Ser Cys Cys Cys Thr Pro Ala Trp 50 55 60

Ser Thr Glu Gln Asp Ser Ala Ser Lys Thr Asn Lys 65 70 75

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Thr Val Cys Tyr Leu Ala Ser Ser Ser Ala Ser Arg Glu Thr Ala Thr 20 25 30

Arg Gln Ala Pro Gly Asn Trp Lys Met Xaa Ser Lys Cys His Ala Gln 35 40 45

Leu Leu Phe Thr Phe Tyr Leu Asn His Phe Tyr Gln Ile Arg Leu Asn 50 55 60

Pro Gly Tyr Ser 65

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Cys Arg Leu Ser Lys Ile Ser Thr Gln Arg Val Val Pro Asp Gly Pro 20 25 30

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Arg Leu Ala Pro Pro Ala Asp Thr Pro 50 55

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His Asp Ser Gln Ser Phe Val Ile Leu Tyr Tyr Lys Lys Leu Asn Tyr 20 25 30

Tyr Phe Lys Tyr Gly Gln Ile Arg Ala Phe His Ile Ala Lys Val Tyr 35 40 45

Gln Pro His 50

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<211> 56

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Leu Tyr Ile Arg His His Asp Ser Gln Ser Phe Val Ile Leu Tyr Tyr 20 25 30

Lys Lys Leu Asn Tyr Tyr Phe Lys Tyr Gly Gln Ile Arg Ala Phe His $35 \hspace{1cm} 40 \hspace{1cm} 45$

Ile Ala Lys Val Tyr Gln Pro His
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<211> 67

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Cys Val Thr Ala Leu Lys Ala Ala Gly Pro Pro Leu Thr Phe Trp Lys 20 25 30

Gly Lys Trp Val Gln Cys Cys Leu Pro Leu Trp Gly Leu Leu Gly Ser 35 40 45

His Ala Phe Tyr Ile Tyr Ala Val Asp Ile Phe Met Phe Pro Gly Ser 50 55 60

Phe Ile His

<210> 581

<211> 77

<212> PRT

<213> Homo sapiens

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Thr Ala Gly Gln Thr His Gly Thr Gln Asp Lys Gly Ser Lys Asp Ser 20 25 30

Thr Ala Ala Asp Ile Leu Cys Asp Ser Leu Glu Ser Ser Arg Pro Ala 35 40 45

Ala His Ile Leu Glu Gly Lys Met Gly Thr Met Leu Ser Ala Thr Leu 50 55 60

Gly Pro Ser Trp Val Thr Cys Ile Leu His Leu Cys Ser
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<210> 582

<211> 51

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<213> Homo sapiens

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Asn Arg Asn Trp Ser Lys Val Trp His Thr His Ser His Val Asp Val 20 25 30

Lys Leu Cys Leu Glu Phe Leu Cys Gly Val Trp Phe Gly Leu Gly Phe 35 40 45

Leu Gly Val

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<211> 60

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<213> Homo sapiens

<400> 583

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Cys Ser His Ile Arg Gly Pro Ile Lys Ile Ala Arg Asn Lys Phe Pro 20 25 30

Arg Thr Leu Thr Ser Gln Glu Leu Arg Arg Phe Ala Glu Tyr Ser Gly 35 40 45

Met Met Phe Gly Asp Gln Thr Thr Ala Gly Gln Lys
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<213> Homo sapiens

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Met Ser Thr Ser Asp Gly Phe Ala Pro Pro Pro Gln Leu Gly Ser Arg 20 25 30

Cys Ser His Ile Arg Gly Pro Ile Lys Ile Ala Arg Asn Lys Phe Pro 35 40 45

Arg Thr Leu Thr Ser Gln Glu Leu Arg Arg Phe Ala Glu Tyr Ser Gly 50 55 60

Met Met Phe Gly Asp Gln Thr Thr Ala Gly Gln Lys 65 70 75

<210> 585

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Ala Ser Leu Gly Ser Ser Ser Cys Arg Asn Gly Leu Ala Ser Lys Trp

Arg Gln Ala Asp Pro Ser Asp Gly Tyr Met Glu Pro Cys Phe Gln Leu 35 40 45

Leu Phe

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<213> Homo sapiens

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Gln Met Ser Asp Asn Pro Phe Tyr Ile Leu Ala Ser Leu Gly Ser Ser 20 25 30

Ser Cys Arg Asn Gly Leu Ala Ser Lys Trp Arg Gln Ala Asp Pro Ser

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Ser Val Thr Cys Asp Arg Leu His Ala Asn Ser Arg Val Arg Tyr Leu 20 25 30

Trp Cys Gln Lys Asp His Val Pro Gln Met Gln Asp Gln Asp Leu Glu
35 40 45

Met Glu Ser Met Lys Ala Leu Glu Lys Leu Val Lys Arg Arg His Pro 50 55 60

Pro Val Ile Phe Ala Ser Leu Val Gln Asn Val Thr Lys Met Pro Arg 65 70 75 80

Met Ser Gly Val Cys Val Ile Leu Thr Val Leu Lys Pro Thr Ser Ile 85 90 95

Pro Ser Ala Leu Leu Met Gly Asn Leu Met Ile Met His Ala Lys Ser 100 105 110 .

Lys Lys His Arg Val Arg Asn Arg Arg Lys Leu Lys Ser Cys Leu Trp 115 120 125

Val Asp Val Lys Ile Thr Gln Leu Gln Leu Leu Ser Leu Lys Met Gly 130 135 140

Ile Met Gln Glu Gln Ile Met Gln Arg Met Leu Thr Asn 145 150 155

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atttagctct	gatgagtact	acacccctga	tastccccc	agtttgtaac	aattttccta tcaaaacgag	540
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<210> 606 <211> 263 <212> DNA <213> Homo sapien					

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1 5	is His Ile Ile Asn Gly 10 ln Ala Ala Leu Val Met	15 Glu Asn Glu Leu Phe	
	25 al His Pro Gln Trp Val 40	30 Leu Ser Ala Ala His 45	
35 Cys Phe Gln Asn Ser T 50	yr Thr Ile Gly Leu Gly 55		
Ala Asp Gln Glu Pro G	ly Ser Gln Met Val Glu 0 75		
85	sn Arg Pro Leu Leu Ala 90 er Val Ser Glu Ser Asp 105	95	
100	100		

Ser	Ile	Ala 115	Ser	Gln	Cys	Pro	Thr 120	Ala	Gly	Asn	Ser	Cys 125	Leu	Val	Ser
	130					135					140		Leu		
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				165					170				Gln	175	
Lys	Asp	Ser	Cys 180	Asn	Gly	Asp	Ser	Gly 185	Gly	Pro	Leu	Ile	Cys 190	Asn	Gly
Tyr	Leu	Gln 195	Gly	Leu	Val	Ser	Phe 200	Gly	Lys	Ala	Pro	Cys 205	Gly	Gln	Val
Gly	Val 210	Pro	Gly	Val	Tyr	Thr 215	Asn	Leu	Cys	Lys	Phe 220	Thr	Glu	Trp	Ile
Glu 225	Lys	Thr	Val	Gln	Ala 230	Ser	Ile	Val	Gly	Gly 235	Trp	Glu	Суѕ	Glu	Lys 240
His	Ser	Gln	Pro	Trp 245	Gln	Val	Leu	Val	Ala 250	Ser	Arg	Gly	Arg	Ala 255	Val
Cys	Gly	Gly	Val 260	Leu	Val	His	Pro	Gln 265	Trp	Val	Leu	Thr	Ala 270	Ala	His
Cys	Ile	Arg 275	Asn	Lys	Ser	Val	Ile 280	Leu	Leu	Gly	Arg	His 285	Ser	Leu	Phe
His	Pro 290	Glu	Asp	Thr	Gly	Gln 295	Val	Phe	Gln	Val	Ser 300	His	Ser	Phe	Pro
His 305	Pro	Leu	Tyr	Asp	Met 310	Ser	Leu	Leu	Lys	Asn 315	Arg	Phe	Leu	Arg	Pro 320
Gly	Asp	Asp	Ser	Ser 325	His	Asp	Leu	Met	Leu 330	Leu	Arg	Leu	Ser	Glu 335	Pro
Ala	Glu	Leu	Thr 340	Asp	Ala	Val	Lys	Val 345	Met	Asp	Leu	Pro	Thr 350	Gln	Glu
Pro	Ala	Leu 355	Gly	Thr	Thr	Cys	Tyr 360	Ala	Ser	Gly	Trp	Gly 365	Ser	Ile	Glu
	370					375					380		Asp		
385					390					395			Lys		400
Lys	Phe	Met	Leu	Cys 405	Ala	Gly	Arg	Trp	Thr 410	Gly	Gly	Lys	Ser	Trp 415	Gly
			420					425					Thr 430		
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Phe															

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<221> misc_feature <222> (1)...(385)

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<210> 619 <211> 869 <212> DNA <213> Homo sapien	
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<211> 267
<212> DNA
<213> Homo sapien
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<221> misc_feature
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                                                                        180
ccccaggagg ccatcagtag cgagctactg cctcggccac aacctcccag caggatngcc
                                                                        240
cgcggtttcc aatctgcgaa aggaggaccg ccnagccaga aatgccnagc cnagcgatca
                                                                        267
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<210> 622
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<212> DNA
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<221> misc feature
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<223> n = A, T, C or G
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                                                                        120
acagatgtga aggatattcc ctttaatttg acaaataaca tacctggttg tgaggaagaa
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gatgcatctg aaatatctgt ctcagtggta ttcgagacat ttcctgaaca aaaagaaccc
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agtctcaaaa atatcatcca tccatactat catccgtact ctgggtccca ggaacatgtt
                                                                        300
tgccagtcat cttctaagct tcatttacat gaaaataaat tagactgcga caatgataac
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acacattaga aanaagantt ctgggctttg aagaaagaaa atgttccact tcataaagaa
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                                                                        780
ggttgaaaga agaatgggag agcccngaan tttttgcccn gaaattttcg ggaaccctac
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tggatgggtc nactggttgg ccatgaatga ataatggact aatcnnccaa ttcctnggga
                                                                        847
agggaat
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<211> 681
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<220>
<221> misc feature
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<223> n = A, T, C or G
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<210> 624 <211> 661 <212> DNA <213> Homo sapien	
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ctacgccgga caacggaccc tcttcccctt tcggcttccc	tataccaatt	cgaatcttgg	ctagtcgtct	cctacacctt	180
cgtaccgtcg atatatagtc	accacagact	agcctattta	ggtgtcctag	actcgttatt	240
gatccactca ttagtctagt	actatgcgtc	acgtatctta	gttgcctaag	agggagatta	300
aatcctccac aagttccgac	gaattcctgg	actctcgtac	tagcaaactt	tcttatgagg	360
cttccttgta tatcttctgg	atgtttctcg	tgtcccggtc	ctccgctact	actagagete	420 480
cttgccctat ctctagaagt ctatcgctac ccgctcgatt	agaggactet	aatcttgaaa	cctgaggtag	tacacaaacc	540
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gaatctactt tancttc					617
<210> 630					
<211> 644					
<212> DNA					
<213> Homo sapien		•			
<220>					
<221> misc_feature					
$\langle 222 \rangle$ (1)(644) $\langle 223 \rangle$ n = A,T,C or G					
<400> 630 cnntcggcnt gggttttntt	ctgagnnncc	accacaca	ccccccaaa	cttacaccca	60
ccaaacactt tccgccccct	acctaggaga	cattagaagg	gtttaggctt	cggcgtatag	120
taaagtcctc tacctcggaa	gtagagaatt	cggtatttaa	attcagggtt	agaggctcgc	180
tcgttagatt tatagtttag	gtttagaatc	ggaaaccttc	gatcttcctt	agaagggtaa	240 300
taagtgaggc cctaaatccg	tctaaccaag	gcgttaaggt	catatagaca	ttaaggaata	360
gttcggtagt tatcgaaggc	acacayycay actcctctct	aggetagget	tttctcagtc	ttagtactcc	420
gggaccgtcg tcgcanaaat	atcgatggac	ggtaggtatc	tccgcgttac	gcgtcgggct	480
agggatatag agcgaattat	cggcgagagg	cggtcgctan	gaatcggtat	caatatgntg	540 600
ttetttacce taeggatate ateggacece taaaataaca	ggcagaaaac	ataaaacctt	ctnaccangg	acaagggatt	644
alegyacece tadadidaea	i glaacalila	gantactage	4000		
<210> 631					
<211> 526 <212> DNA					
<213> Homo sapien					
-					
<220>					

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<221> misc_feature
<222> (1)...(526)
<223> n = A, T, C or G
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cccatagccc caccggnccc acccaaattt taacaaaata aatntaccta tcgntcacct
                                                                        120
atccencgta tegngtaggt eggtaceggt aceggngate nenaegattn ttegggtegt
                                                                       180
cncccttaan acggncccgt agccnccgga anaaatacta cgagngactc taatntagca
                                                                       240
anaccegeeg tenattanta geateettag tetteeaatg negnggattn ngaateettn
                                                                       300
naagttatcg ggtagaacgg gtcccggtcc cccgccctct ttncaattaa cgccgggtac
                                                                        360
aaantcggtt tctaaattcc ncacgaattt ngncggcaac attcncgggn ccttattanc
                                                                        420
cntttccaac cccgatacne nagetegate gggetttane gaateegggg teneceega
                                                                       480
ngantccggg tcctttgagt ngctctagga cggttacgac ggagga
                                                                       526
<210> 632
<211> 647
<212> DNA
<213> Homo sapien
<220>
<221> misc_feature
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<223> n = A, T, C or G
<400> 632
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gtgttttgag tttcttcttc gtcgtctctg ggaggttcgg tttcgattga gattcgggtt
                                                                       120
                                                                       180
cgtctttatc ttacgaggca ccctgatatt gttgcgcttt ggtttggttg tggagagttt
tgtcctactc tagcgggtca tgcggatgat atgtagcctg cgtggcctga tagtgatgtt
                                                                       240
                                                                       300
gtgagcttga gaggggagtt gtgggtgttg cgggcggagt aggaggggtt ggagcaccgg
gattgggaga tatagaatca taagtgttag gtataggtcg attgagcgag ttcgtggaat
                                                                       360
tegtgtggte atcataatta gagtgaggat gggetetata tttettagag gacgeaeggt
                                                                       420
cgtgattcgg ggtttgatgg gtgttcttct tgtgggcacg attagcttgt tcatgatggt
                                                                       480
aaggaccata ctgtttcgaa tgaggattcg tgtcttcgga ttgttgtgga tattgtggnc
                                                                       540
tanactattt agtgtaagcc ggaggtggtt tgccgtggtg gagtatccga nnttcattcg
                                                                       600
ganggtatgc gtgcggagcg gtccttgtag acattccgga aaaatgg
                                                                       647
<210> 633
<211> 630
<212> DNA
<213> Homo sapien
<220>
<221> misc feature
<222> (1)...(630)
<223> n = A, T, C or G
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gctcccaccc gtctctctaa tcctcaggaa ccgatccacc caaccaactt actaatgtcc
                                                                       120
tacagtaaac acccgagaat ataaacccac acctaggcct ccaatcctac cagggaagca
                                                                       180
                                                                       240
agaagccgta gtctagcgta ttacgaaccc gagatagaga cggagatact tagttttatt
ctctcggaat aggaaagacg actggggagg gaatataggc tagcgcgggg ataggggcta
                                                                       300
```

atatacctag gcgcgaagaa gagagatcta tttcgatctc	atgttcccgt acttcgtact ctagatttcg	cgctctctta agaaagagac ctagctttat gtatcgccgt tacatggnga gacgggacgg	gttagaggtc ataggtagtc cgtatgtatt	tccgaagcta gctctagtcc cgaaatagtc	taaaggagag cataagcgac ttcttcccct	360 420 480 540 600 630
<210> 634 <211> 647 <212> DNA <213> Homo	sapien					
<220> <221> misc <222> (1) <223> n = 1	(647)					
caaccctata taaagagaaa gctagttgat ttagtatgct ggaaagctat ttactaccct aagttatagt tctcgggttc ttccgcctta ccttataaac <210> 635 <211> 645 <212> DNA <213> Homo <220> <221> misc <222> (1).	gtttactcgt gtactttcct tttatccggc cgggagtta tcgttatta agtcgggtta cgaaacaacg tcagccggta gcttccaagg cncctacagg	ctgaccccc ataggggaat ttatatgtta gttatagggc acgaggtcac tcgcgattct gcggtcggtc tattagtcga atccctctat ttcctcggaa cagacccct	cgaggagaaa agagcttagc ttagttctgg gggatagcgc cgaggtcgaa aaaactagtg aattatagcg ttgggggtct gcgaggggtt	taggaacgaa gtaatgactt ttatctcggg gtaccctttc aggatcaagg tagtaccttt gatagatcga tctccctctt ctacttaagt	gagcgggtga tcgttatatg tctaattccc taaggttctt atcttccctt acctcctcga gacggttctt ccctttgtc	60 120 180 240 300 360 420 480 540 600 647
agatacccaa ataaaagact gtcccactct ataaaatcca gttcgaggcc tcgggggcaa tctcccgcat gcccgcggct aaattctct	gggtttttt agaatagttc tcgcgcggtt cgaccacac gtcaagcccc gggggctttc cggttaaagc agagactctc acatatcttg agaggatagt	ctgagcccc cactcaactt agctacacag ccggtatcgt acggtaagcg aaaatacaaa acgcctctaa gcgtatatca cggattagct cggggtcgta atactcttat	cgtctaagta cctacgggaa cgttttccca ggggtagggc acaactactt agtactactc actcgcatcg ccgagggact gttaggcagt	aaactctaga tctcacgaat taccaatgtc taggcgaaga aaagtttacc gtttcgagaa cttctagcat atagggttaa acgaggggac	acttccaaac cccgattcaa gaaaaataaa ggcaggaacc ccttctaaag ggggtagtca tccgacggtc ttagtctagt	60 120 180 240 300 360 420 480 540 600 645

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<213> Homo sapien
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<222> (1)...(643)
<223> n = A, T, C or G
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accgagattt tattaatcgt aaaactcgcc ttcggtacca agtcttcctc cttcccgtaa
                                                                        180
cctggctccc tcctagnggc tttacgaacg tccctcctct tcttacggct cggaagtggt
tacggttaaa tccggaggng gggctaacga atccaaggct aactcctctt anagtttgtt
                                                                        240
                                                                        300
gtccncncgt ttagtaagga tccgtggagg gcgagtattt gncccccggc ctttattnta
tagttcccta gtacgataaa gntaccggct atcctattac agcggataaa agttatttan
                                                                        360
                                                                        420
agggccgacg tencegetag acaggetaca getagnggag gtacegeete egactantee
gttgnttccg acaaggnagt ttcggttaac tccacaaact cctccgccga ctctanggtg
                                                                        480
                                                                        540
gggacggcag ttcccncgtt tagtgtgcgt tatagagaag ggcatttgag ttggacgtta
                                                                        600
cnttttaaca taggttattc cgtttaggtt cttgcgggcc cgtgggggta gtncnccggc
                                                                        643
gcgttnntat cggcgatttt ccgcagtttc cgtttccggn tnt
<210> 637
<211> 631
<212> DNA
<213> Homo sapien
<220>
<221> misc feature
<222> (1)...(631)
<223> n = A, T, C or G
<400> 637
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cgctgggaag actagaagtt agctacggac gattagtgtg attccactct taataacgag
                                                                        120
taatcgttta cgtcgggttg gtgtttcggg gttttggaga gtaagcgtag ttgtggagtt
                                                                        180
togoatatag gtocoottac ttoggogato togtottotg toggttaggt tattattgtt
                                                                        240
                                                                        300
catccttcgc attagtagta gggttggtcg gataaatcga tagctattct ttagaattcg
tagtcggaga attcgtgtac gaagtccttt aagttcttta agttcgcgag taagacgtgt
                                                                        360
acggttattt tgtcgtcgac gtaggtgtcg tttacgggag tttcgtttta ggggtttacg
                                                                        420
tagaacgtta ttaagcacgg taatacgata gaggattacg cgacgtattc gtcttagaac
                                                                        480
                                                                        540
gtcgattttt cgaaggcgca tttgttatcg aaggggagtc cttggagaat cgagatattc
caagaatatt acggagatta cagatcggaa ggctcccgag atcggacgta ttaccggtct
                                                                        600
                                                                        631
cgcccgaaac gagtaggtat cntccggata a
<210> 638
<211> 606
<212> DNA
<213> Homo sapien
<220>
<221> misc feature
<222> (1)...(606)
<223> n = A, T, C or G
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<400> 638
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                                                                        60
caataagtcc ggtcgagtag agggaatcag gggctggtan aaaggaccac gggcggaaaa
                                                                       120
taccggtctc cttccgggga gcgacgtcgg ggaaagggaa gagagcggtc tagttcgtag
                                                                       180
                                                                        240
gcaaacaggt cagaaaagtt aaggttaaag gtcggagggg agaggatagc tagtacgctt
agttcggggc tcgggcgcag ggccactttc ctctttcgcg ttcctttact ctgcttacga
                                                                        300
gttcaggctc cggagttccg cgccggaggt cgtcgcgacg ctaggaatgg ggactcgctc
                                                                        360
                                                                        420
agtccccggt tatccttcgg gattctatgt tttcgccgat agacggagac cgggtagtag
ggttccgtcg taccgccact cgtcgccttg atccggcccg ctccgcttaa gggcgatgaa
                                                                        480
                                                                        540
agattaggta ttagggctct acgggacgag gcatagggcg ggagaagggg ggaggggtcg
ggggtcgaag ggantaagaa atcgcantcg cgcggggtcg gtagganccg aaatttttct
                                                                        600
                                                                        606
cnncgt
<210> 639
<211> 592
<212> DNA
<213> Homo sapien
<220>
<221> misc_feature
<222> (1)...(592)
<223> n = A, T, C or G
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                                                                         60
atcccaccct accgcgggga gtgggttgna cgcttagttc tagaatcctc ggaatcgtcc
                                                                        120
tccggcgttg gtagttccgg cgattccgag tatgccgaag tgtatcgctc cgtctagagg
                                                                        180
                                                                        240
ttggtatctg tttatcgcga tgacgctatt gactcggatg ctttcgaagt agggggatag
                                                                        300
gcgcatagat acgcctccgc ggtgtcctct gaagtggccg catccgtgga cgcagcgtag
                                                                        360
acagetetgg tggacgataa eggetteteg tacteetaet eeggetatta tgttagagag
gacttgtttc tgaacggata taccattagc gaaggggtac cctccgctaa cgcaggcgtt
                                                                        420
tctaacagtt cttccgggcg ctccgaattt agattgacgc ctccgcagca ttgtggggatc
                                                                        480
                                                                        540
ctcttccgtt agccctcttt ataggatttc tcctccgccc cgaaagangg ctggtcgtcc
                                                                        592
ccggcangta tgtctagctc gaacgctttg ttactccttt gttttcgaaa na
<210> 640
<211> 637
<212> DNA
<213> Homo sapien
<220>
<221> misc_feature
<222> (1)...(637)
\langle 223 \rangle n = A, T, C or G
<400> 640
                                                                         60
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                                                                        120
gggctcccga agtagcttag gatcgccggc tagttccggt cccgcccgtc gaaagcgcgg
                                                                        180
ttcggcgggc ggccccgcgt tcgttcgcgg gctttaccct catagagtgc caggtctcgg
                                                                        240
ttcttacggg ttcgtcggcg atagatttta cggcgagagg tcggtatctt cgccgcttta
                                                                        300
cgttcggtcg gcatctacgc ctagttcaca ggtagtttat gcgccggagc gcgtgacgga
gaggttatac gggacgcgga agaaccgcct ccaaatgact agtacaggct cgttcgggcg
                                                                        360
                                                                        420
tagateteet egeteggteg geggttetta ettetaggge egetetaegg tttaaggegg
```

gtaaacgatt acct	gaaacta tactcaagtt ccggtt ctagcccttt ctcgcga gacgtcgcga ggtaaaa gcgacctcgg	ttactcgcat ttcaacttta	aacgggagaa	cggggtccgg	480 540 600 637
<210> 641 <211> 649 <212> DNA <213> Homo sapi	ien				
<220> <221> misc_feat <222> (1)(64 <223> n = A,T,C	19)				
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<210> 642 <211> 645 <212> DNA <213> Homo sapi	ien				
<220> <221> misc_feat <222> (1)(64 <223> n = A,T,6	45)				
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<210> 643 <211> 586 <212> DNA					

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<213> Homo sapien
<220>
<221> misc_feature
<222> (1)...(586)
<223> n = A, T, C or G
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                                                                        120
                                                                        180
atagcgatag anctttcata gtacaaaggt aactaagagg aaaataatgc agattcagaa
ctagttgcca aattagaact cgattaggcc aaggatccga gcctggcgct atcacttcgg
                                                                        240
                                                                        300
gacttaagct acggtagagc agtcggtcct gaagcatagc tcccgtagga cgtaggaaac
tagtccggca cggaggacat actctcgagt ctcggaacgt ctatttagaa tataaacgca
                                                                        360
                                                                        420
ttaacctcag aaggcgccga cgcggttact ctctagggaa ctatttcatt ccttccggag
ctcccctatt tttccaacac atataccggc aaaggaaaat cttntgtcct cggtctaaag
                                                                        480
                                                                        540
agagggaaaa aaaacgatat ctaggttcgg gtttatccat ttaaaaaanat ngacgcgact
                                                                        586
actccctttc aaagggagtt tccccctagg nagagttcaa cngaag
<210> 644
<211> 646
<212> DNA
<213> Homo sapien
<220>
<221> misc_feature
<222> (1)...(646)
<223> n = A, T, C or G
<400> 644
                                                                         60
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                                                                        120
tcggttcggc gggggtgggg gtcgtcctcc aaaggagttg ctagagggct tttagtggtt
                                                                        180
                                                                        240
ttagggcggg aaggggttag agcggagaga cgtcgtcgtg gaagcttctg gcggagcgcg
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agaaggtagt tagcgccggt tcggaagatt ctcagaattc gagaagaggt agtggggcgc
                                                                        360
ggagagagag tttctaagtc taaacgtaga ggtcgtccta gtcgggccgg gagtagcttt
taagctagag gtcgaggtcc tcgtttaggc tccgggctct tcgggcagta tcctctttct
                                                                        420
                                                                        480
cgaggaacgg agcgaccgac gtcgtagccg gacccgtcta tccgtacgtt tagagatacg
                                                                        540
ctcacctcca cgggcgtata tgcccgtata cgtataaacg cgtaatatac tcgcgcgtaa
                                                                        600
aacacgtata cactatatac acgcatcgta cggaccgtat agcgttatac gcgcgcgtat
                                                                        646
attaatttac acttatatac gcgttaacac gatatatcac acnccg
<210> 645
<211> 654
<212> DNA
<213> Homo sapien
<220>
<221> misc feature
<222> (1)...(654)
<223> n = A, T, C or G
<400> 645
                                                                         60
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ggttggnata cgttntangg <210> 646 <211> 645 <212> DNA <213> Homo sapien	gangeetgng	tccgntattc	cttgttttgg	cctn	654
<220> <221> misc_feature <222> (1)(645) <223> n = A,T,C or G					
<400> 646 tccttcggct tgggttttt acccaccaaa aacaacgtca gtagacccta ccacagccat gagctatcaa acaacggagg cggcactaat tcctttcaag aagggccaac gaggttttaa gttaaaggta cgagacctag aaaacgacca aaagtcaaag gcgatcagta acgcacgtac ccgaatattt agcgcaaaaa ncgganangg antaaatngt	acacaacttc ccaatagtca ggaaaggaaa tactcgctcg agcgacccc aagagagtag acccttacaa ctttcccacg atatccgagg	gggtatacgg aacaacaagg gagcagggtc gcttgtagtt gtatcgagtc aattagccca atatcacctt cttttctttc gagaattaga	accttaagag gcgcacccaa aacttagcag cggggtaaag ttcttcgtat ccaaatcgcc aaaacgccaa tttcactctc agctattacc	agacccegta tccatccata agatcgaagt tccgctctca tcattaaggc taaaccggca ccccaaaaac caaaacaaac	60 120 180 240 300 360 420 480 540 600 645
<210> 647 <211> 753 <212> DNA <213> Homo sapien					
<220> <221> misc_feature <222> (1)(753) <223> n = A,T,C or G					
<400> 647 accttacctg gtaccgggcc tatacgaaaa gctgataata tgatttttt tgtgttaaca catattgatt agtttgattt aaatggattt gattgacttt aagcatttct ggaccagaat ttgaagttag caatgtggca aaatctgagc tattcttgc gaggtgtttt gttcatgtga	cattgacttt attgtagtat tatggtgatg gcatccattt aagttaagtg aaatctctaa ctggagaaca	tgctgtttaa ataaaatcgg ggatcattgt ttatctgtgt gtataatttg tggaaataaa agtgttattc	atcccttgag attcaccatc gtgttaactg tactttcatg ctttttacac atgcttcaga ataataattt	cctttgataa cttctgatgc tattaagaag ttttatttaa gtttatataa atgatgacat aatagcttct	60 120 180 240 300 360 420 480 540

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gacaagatga ctggctctgc	gtgctgaaga tgactgtggg	tgacatgaat tgatataact gacataccga gggnctggac	cctacctctt aaaggaatgt	atgtaggcta gggttaatat	gaggtaaagt cagangacct	120 180 240 300 306
<210> 651 <211> 769 <212> DNA <213> Homo	sapien					
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catgtcttag agttgcatga aggtttcagt tgttagcttc atgtcttatt gtatttcttt ttctaatcca accattttca tattcagcga taatagaata atggnnacga tttaagagac <210> 652 <211> 267 <212> DNA	aagcactctg agttcatcat aaggtttaaa aaaacaatga gaaagatgtc ttgccatatc gagatacctg taataatatt gttttccaga tgngnttttg ttaatagata taagnactat	tttctaaggc gttgttgcta gcatattggc tgaaatcatg caacctaact atcaaatcct caatgacagg ggtgtccca aaaatattat agctatataa gattcttgng tggnctccat cctttaaaga	ggcagacaat tgtggaaaac tattaagcac aatgttgaaa gttatttcta accttagttt agaccttttc ttgctcattg catgtggtaa tttaaaattt gaccagangg	tttacatctc cttaacagca ttagtatagt gaagcttgtg atcccttaaa aagccagtgg agagcatcct tactcttatt catcttatca tctcactttg cttaaagca	ttgctatacc tcatgtcata gcaccttaaa tttgtaaatt gtctctcaat ttctctcaac tgatgtcaaa ctctccaaa	60 120 180 240 300 360 420 480 540 600 660 720 769
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cgcnactcta cggggctggg cctcnttgcn	gnanaangat cgcgcgccgn	tggctcttnt ggttgnacna gctcaccccg	gggntgggcc ggcgccgccg	ggncgggctg cccncacacn	ctagnggatc gggcgttaag cccggagcac ccncacccan	60 120 180 240 267
<210> 653 <211> 501 <212> DNA <213> Homo <220>	sapien					

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<222> (1)...(501)
<223> n = A, T, C or G
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gctnctctag cancagatgg gttatcgagg aagatgactc caangggcta nantcctatg
                                                                        180
cncatcctaa aanncanctg ctgtnttcag agtacgcgac acatcatcnc tnatgcattg
                                                                        240
ntgancaaga cgggcangtg cttatcctca gcgangatgc ccttaaccan gagctcgaat
                                                                        300
ggaentatea centanaggt acanntneeg caccacaca engettgenn eetgaegetg
                                                                        360
gactggatcn cttaggccac caatneeceg tttnecacat neetgggaen ctananatae
                                                                        420
                                                                        480
tcganggggg gcccggtanc caattcgccc taatactgag ccttgntacg nacgctnact
                                                                        501
nggngtccta ttanaacgtt g
<210> 654
<211> 710
<212> DNA
<213> Homo sapien
<220>
<221> misc feature
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<223> n = A, T, C or G
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                                                                         60
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acactgagtc caccacagna aaactcanca ccaggcagac cccacaactg cagaatccag
                                                                        180
gctgcaattc acagactaat cntctagacc cacctcagta ccagatggta ccacacagct
caaggnttta ggtttgcgtg gtanactcaa tctctatctt tcaccactgc cagcctgact
                                                                        240
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tcagagatcc tgngctctgg acagtcctca gtggcaggca actctcagga gcctcaggnt
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atgtattcca gacttctanc ataccacagt gccatgctga ttgcatctat agangctcag
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                                                                        480
gtgcncctca aanctgtgcc tgctgcagna ngccccacgt ctctggcatg ccccaatgcc
atgngtggna acanttgact totgggcatg ntggaattcc ctaccactga ncctgaccat
                                                                        540
aggnggganc ccatttttt cgaggggggg gcccggcccc caattcencc ntatagngag
                                                                        600
ncgtanttac gcgcnnctta ctnggccngt ngtttaacaa cgtcnntgan ctggggaaaa
                                                                        660
                                                                        710
cccctggnng cnacccaaat taaacngcnt tgcannacat ccccctttcg
<210> 655
<211> 202
<212> DNA
<213> Homo sapien
<220>
<221> misc feature
<222> (1)...(202)
<223> n = A, T, C or G
<400> 655
                                                                         60
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cantegacea ecegagettt ttteegatee cancatenat gengattttn tetntgentg
                                                                        120
                                                                        180
ctgngcctgc acctttgnta ggtcaagcct ggcccatctt cgacaacttc ctcatcacca
                                                                        202
acgatgaggc atactctgac ga
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<211> 308
<212> DNA
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<220>
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                                                                        120
ccattcatgg aggcctgggn anttctgtga ntgacntnga cnctanacnc tnccactgtn
                                                                        180
                                                                        240
tgctatccag acttgnttng aatatnttat tggcnaaana canttncgga atgctgtgnt
tgnncattga angatctgat cactatgaga gggtgaggac nncctgctng ctggcantnt
                                                                        300
                                                                        308
ntaacccn
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<211> 696
<212> DNA
<213> Homo sapien
<220>
<221> misc feature
<222> (1)...(696)
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                                                                         60
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qtqqqtcttq ttacagtaat gagttactgt aaggaaagtg tgacatttcg agcaatttga
tttgtttaaa aactagagca gtttcagggt tttccttgta aatctgtctt atgtgtcttc
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                                                                        240
aatgttcttt cttgaggagt agagaaagga attgttagga atgatgcata aaccatggct
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tattttatct cgctgccacc cataatcaga gcagattctt gggactatga ccctcatgga
                                                                        360
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agggtccaat caggactatt ttatggagct ctgctcacca actttaagtg agcaccaggg
                                                                        420
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                                                                        540
ctggccactt cggactctta tttaactggg tattctcant taaggaggcn ngggtggtct
                                                                        600
tggcttgtna aggaaagcct gtgcaatgga atgactttaa aaccccccat taaaaaaaaa
angntataaa tottgggtot taanaangaa gootgggtto tnttancoca ttttnccccc
                                                                        660
                                                                        696
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<211> 698
<212> DNA
<213> Homo sapien
<220>
<221> misc feature
<222> (1)...(698)
<223> n = A, T, C or G
<400> 658
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<210> 660 <211> 849 <212> DNA <213> Homo sapien	
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tctgaataca tgtattactt atgtgatttg tttagtggat gttaaataga tactgaagct atgggaaatt gggaaagaac gtaccacagt gccgaagtgc gtaacagttt tcttggga tttcttgggt agnttancat aggaaaatct ggcntcttat cggccttgg	caaaagtcgg atgggcaggc tgtgcaaata cacctcaggt aacacaatca ggnttcaaaa aatttattgg	tagctccttt tggattgata ggaaaaggag acttccatct tttagtgatc gatgatgctg tcagtaaaat	gatcctaagt agaaaaaagg agagcaacag cccatctcct ctggttgata atagttttat atttgaataa	gccactgata agacagagaa aacagaatta gaagaattca ttttcaatac tgcccctgaa aagngganga	360 420 480 540 600 660 720 780 840 849
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		gggnccccaa acctttccct			tgcactggng	600 646
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nggttttcta	gaattaaaaa	attaatgtgt	agtgccagcc	ctagatgtaa	gttacatata	180
tcaactctat	ccaattttgt	cagccataaa cattgcaatt	acttaccttt	aggagatage	tacatgcaga	240 300
		acttacgcta				360
ttgcaaaatt	gcaatataag	ttgcatatcg	ttagagtgaa	aagatgtaaa	gaacccatag	420
aagccagtga	tgaaggacat	ttatattttc	acctttacaa	angaccttaa	aattgcctat	480
gtggagcaga	aactggagga	gggcnaancc tccccaggtn	atcngtaaaa	aaaattttgn	thttaaaaaa	540 600
		caaaaaaaaa			ccccaaaaaa	650
			35			
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	<u>-</u>					
<220>						
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$\langle 223 \rangle$ n = R						
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agaaagctgc	aatttcaggt	tttcaaccta	ataggtgata	tttaagaaaa	aaaaaagca	180
					tagcctgtca	240
ggtggcctaa	tgtaattttt	gacatctcta	ggaattttaa	tagaaccaga	aatgggtgcc aagtgattaa	300 360
		aaatcaanat				420
anaattattt	taggactctg	tggctttctc	ttcatagaaa	tagaaaaaaa	aaattgtata	480
					caaagcagga	540 600
		caattatact aagaccagtg				660
cctatattta	_	aayaccagcg	ggaaacagaa	caaagaanee	cauacaaac	678
	J					
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<213> Homo	sapien					

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<220>
<221> misc_feature
<222> (1)...(694)
<223> n = A, T, C or G
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                                                                       120
                                                                       180
cttaagtggg gatttatgta tttctcaagc aagtgattaa agcaaaacta ggcacgattg
aaatcaagat cttttaggca anaaagtcat gatgagtttt agaattattt taggactctg
                                                                       240
                                                                       300
tggctttctc ttcatagaaa tagaaaaaaa aattgtataa aaccacaaaa ggtcctgaat
                                                                       360
agccaaagca acactganca aaaagaacan agcagggaag caacacacta cengaattca
                                                                       420
aattatacta ccagggtgta gtaaccaaaa cagcattcta ttggcataaa atagacacca
agaccaatgg ancagaataa agaaccccac aaataaatcc atatatntac cgccanctga
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                                                                       540
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                                                                        600
ggnaaaaact gggaaatcca tatgcagaaa naatgaaact agacccctat ccctcaccat
                                                                        660
acqcaaannt caacttcgga atgggattac aaaacttaag acattccaac ccaagaaact
                                                                        694
atnaaancta ctattaagaa aacagatcnc nccc
<210> 666
<211> 705
<212> DNA
<213> Homo sapien
<220>
<221> misc feature
<222> (1)...(705)
<223> n = A, T, C or G
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                                                                         60
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                                                                        120
                                                                        180
tacaqaaaqc tgcaatttca ggttttcaac ctaataggtg atatttaaga aaaaaaaaa
gcaatcgcaa atagccccac tgcttttaca aatcattttt tctcttctag gtatagcctg
                                                                        240
                                                                        300
tcaggtggcc taatgtaatt tttgacatct ctaggaattt taatagaacc agaaatgggt
                                                                        360
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taaagcaaaa ctaggcacga ttgaaatcaa gatcttttag gcaagaaagt catgatgagt
                                                                        420
tttanaatta ttttaggact ctgtggcttt ctcttcatag aaatagaaaa aaaaattgta
                                                                        480
taaaaccaca aaaggtcctg aatagcccaa gcaacactga acaaaaagaa caaagcagga
                                                                        540
agcaacacac taccagaatt caaattatac taccaaggtg tagtaaccaa aacagcattc
                                                                        600
                                                                        660
tattgggcnt aaaatagacc naagaccaat ggaacagaat aaagaaccca aaataaatcc
                                                                        705
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<210> 667
<211> 817
<212> DNA
<213> Homo sapien
<220>
<221> misc feature
<222> (1)...(817)
<223> n = A, T, C or G
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                                                                       120
tcgtgcctag ttttgcttta atcacttgct tgagaaatac ataaatcccc acttaagatt
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aattacatta ggccacctga caggctatac ctagaagaga aaaaatgatt tgtaaaagca
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                                                                       360
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                                                                       420
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                                                                       480
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tgcatctagg aggtatcgca agccgtttct ggattaaatt cccagctagc ttgcttgctt
                                                                       600
                                                                       660
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                                                                       720
tacgtgttta cgttatttta tttcctanaa caaggengaa ttgggacteg aatggttcag
ttggggtggg ggatcccctg gtncataaaa ngtcanaaag anggtacagg cggaacncca
                                                                       780
                                                                       817
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<212> DNA
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                                                                       120
                                                                       180
gaacaatgcg aaagcgtttt cttccctagg ctgcagattg tcttcttcac cgcccctgct
                                                                       240
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                                                                       300
ctcgttttga gttacaaact ccgcggatta catgtctttt taaaaaagtt tagactacac
tagggaaaat tattttagta tcagaagaat atcagggggt gtagtactca tcagagctna
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Tyr Leu Ala Ser Val Ala Ala Phe Pro Val Ala Ala Gly Ala Thr Cys 35 40 45

Leu Ser His Ser Val Ala Val Val Thr Ala Ser Ala Ala Leu Thr Gly 50 55 60

Phe Thr Phe Ser Ala Leu Gln Ile Leu Pro Tyr Thr Leu Ala Ser Leu 65 70 75 80

Tyr His Arg Glu Lys Gln Val Leu Ile Gly Gln Trp Val Glu Ser Gly
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Glu Glu Lys Phe Met Thr Met Val Leu Gly Glu Ser Leu His Pro Pro 50 55 60

Ser Phe Leu Phe Gln Ile His Ala Thr Trp His Val Gly Gln Glu Tyr
65 70 75 80

Leu Cys Pro Gly Ser Cys Leu Glu Gly Glu Val Val Cys Trp Glu Gly 85 90 95

Ile Ala Gly Gln Glu Gly Asp Pro Gly Leu Arg Gly His Thr Lys Arg 100 105 110

Lys Lys Arg Ile Pro Arg Thr Tyr Pro Ser His Leu Trp Ile Pro Gly
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Leu Trp Leu Ala Leu Leu 145 150

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Ile Gly Pro Val Leu Gly Leu Val Cys Val Pro Leu Leu Gly Ser Ala 35 40 45

Ser Asp His Trp Arg Gly Arg Tyr Gly Arg Arg Arg Pro Phe Ile Trp 50 55 60

Ala Leu Ser Leu Gly Ile Leu Leu Ser Leu Phe Leu Ile Pro Arg Ala 65 70 75 80

Gly Trp Leu Ala Gly Leu Leu Cys Pro Asp Pro Arg Pro Leu Glu Leu

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Cys	Phe	Thr 115	Pro	Leu	Glu	Ala	Leu 120	Leu	Ser	Asp	Leu	Phe 125	Arg	Asp	Pro
Asp	His 130	Cys	Arg	Gln	Ala	Tyr 135	Ser	Val	Tyr	Ala	Phe 140	Met	Ile	Ser	Leu
Gly 145	Gly	Cys	Leu	Gly	Tyr 150	Leu	Leu	Pro	Ala	Ile 155	Asp	Trp	Asp	Thr	Ser 160
Ala	Leu	Ala	Pro	Tyr 165	Leu	Gly	Thr	Gln	Glu 170	Glu	Cys	Leu	Phe	Gly 175	Leu
Leu	Thr	Leu	Ile 180	Phe	Leu	Thr	Cys	Val 185	Ala	Ala	Thr	Leu	Leu 190	Val	Ala
Glu	Glu	Ala 195	Ala	Leu	Gly	Pro	Thr 200	Glu	Pro	Ala	Glu	Gly 205	Leu	Ser	Ala
Pro	Ser 210	Leu	Ser	Pro	His	Cys 215	Cys	Pro	Cys	Arg	Ala 220	Arg	Leu	Ala	Phe
Arg 225	Asn	Leu	Gly	Ala	Leu 230	Leu	Pro	Arg	Leu	His 235	Gln	Leu	Cys	Cys	Arg 240
Met	Pro	Arg	Thr	Leu 245	Arg	Arg	Leu	Phe	Val 250	Ala	Glu	Leu	Cys	Ser 255	Trp
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Arg	His 290	Tyr	Asp	Glu	Gly	Lys 295	Ala	Leu	Ala	Ala	Ser 300		Gly	Trp	Cys
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Pro	Leu	His	Pro	Gly 325	Pro	Asp	Phe	Ser	Val 330		Lys	Val	Gly	Met 335	
Pro	Ile	Суз	Ile 340	His	Gly	Phe	Ser	Trp 345		Trp	Asn	Ile	Ser 350		Cys
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Ala	Pro	Val													

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ccttancaat nggtttttcn ttttttgtcc ctnggnccgn gcgattcaan aaattgaagg 180
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tantctcgga tgtgcagtca caagtctttt gctaatnctt ataattntcn ctaccctttc 120
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cactacacgg enctetnegg ageennggte agtgeetnet nggagacett etetggggea 120
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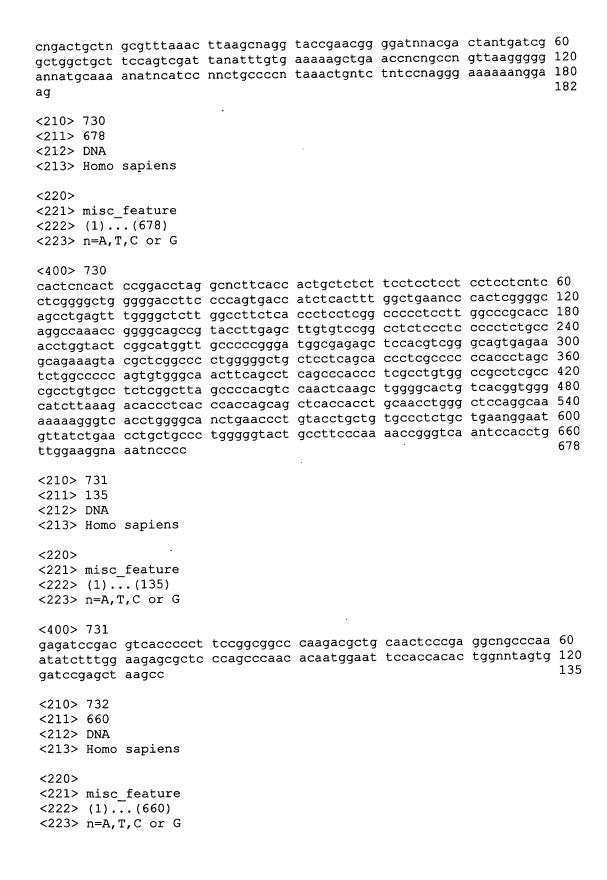
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а
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gageegtggg egegeeegag gggegggete geeteeegee gteeetegea getetgeegg 240
geoegageee gegeegtege egeogeegne ttgeegeteg gneegegegg neeggnaaac 300
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tecegeettt tnggtneeca aaganaenaa gggggagtee ettnatagag gnagngegat 120
ncntcncaac nacntngact ttgnccatgg ggagnaaggt gg
<210> 727
<211> 120
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(120)
<223> n=A,T,C or G
<400> 727
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ggggtcnctt anagngnagg gggttcctcc ccaccacttg ncttgnccat tgngagnaag 120
<210> 728
<211> 130
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)...(130)
<223> n=A,T,C or G
<400> 728
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aattccatgt gtcgagagag gggcaaatac nctccaanac ancnccctca tgctcnacac 120
                                                                    130
atattcgcat
<210> 729
<211> 182
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)...(182)
<223> n=A,T,C or G
<400> 729
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<400> 732
gcttggtacc gagctnggat ccctagtaac ggccgccagt gtgctggaat tcggctttct 60
tcaatcagnt nacgagetge atggtetget aacattgtea taattgetgg catagattae 120
tgaaaataaa gaaaaaaat tgaagctgcc tatcaagttt tggtattatc aaaaacttcc 180
tacaagttat tttacttcaa ccatgttatt acaaatattt taatgaatac tttagagact 240
ttaattacaa aaaactgaga tagtaaaagc aagtaataaa agctgaaatt acttagctat 300
ttgataatta cataaattat tatggtccat tcaacttttc tagtgtttag tttatacacc 360
aggaagactt tectatteta etaacattta taaagtatge taacetatta tttaaaegea 420
tccactatta ggattttatg gcctaaaacg tgatacagtt cagtatcttg atgtcaaaac 480
tttttaagca agtagggatt aagttcaagt gaatgtgatt ttctttcttc ccagtagggt 540
cttctgaata actcagnaaa gctcacttcc attatcttac tttataaaaa aatgctataa 600
gacagaatgg gccgacgtgg nggctccacc tgtatccacc tttggaggcg agnggcgaat 660
<210> 733
<211> 836
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)...(836)
<223> n=A, T, C or G
<400> 733
aattaatgac tttttttccg ccctgccaag ctagtttgtc taaatataat gtaaagaaat 60
tagctactca ttttctggtc cacgaaggtt cctaaaatgg gaagaagtgg agatctgacc 120
ttgttagttc taaatacact aaactgggag tgccatggat ggctttcagg atgtcctgaa 180
tcctctataa ttgtatacaa aatcgtgagt ttttaaaaac tgggttagag ctattggttc 240
ctcagagtct caggcatctt agacccccaa aaaggttaag gactactgac ttaaccaatt 300
aggtttgagt ggcattggct ttgaagaaaa gcagaggaaa gatatatttt ataattctgg 360
gcaacaaaaa agtggatgtg tgccagcatc ttagagtaga atcctcttaa aaggatagca 420
ctgcatatga actagtaggt tttaaccagt gcatatttag gcgaagtagc tcattttct 480
gttagaattc ttttttattt gggaatgggc aagcttttac agcttttacc ttgccaatga 540
atacctggaa tttaaaaaat cttgttaggc atattgccca taaagttttt tttcctagat 600
catatattca gtaaatatgt ttgtagcttt atttcaatcc cccaattcat tgagggttga 660
aacaatttga atggtttgag tgtagaagct aagttatttc tgtagaggct aagggcattt 720
ataccaanat atgttagact tgnggntcct gttaaccatg ctgtanacaa taggaattac 780
tgtatatcca cattttaatt ttaacatctt ctgctttgnt gntggtttga gangga
                                                                   836
<210> 734
<211> 694
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)...(694)
<223> n=A, T, C or G
<400> 734
nagtnotatt theactaeac tgngagtgcc ttggatggct ttcaggatgt cctgaatcct 60
ctataattgt atacaaaatc gtgagttttt aaaaactggg ttagagctat tggttcctca 120
gagtctcagg catcttagac ccccaaaaag gttaaggact actgacttaa ccaattaggt 180
ttgagtggca ttggctttga agaaaagcag aggaaagata tattttataa ttctgggcaa 240
```

```
caaaaaagtg gatgtgtgcc agcatcttag agtagaatcc tcttaaaaagg atagcactgc 300
atatgaacta gtaggtttta accagtgcat atttaggcga agtagctcat ttttctgtta 360
gaattetttt ttatttggga atgggcaage ttttacaget tttacettge caatgaatae 420
ctggaattta aaaaatcttg ttaggcatat tgcccataaa gttttttttc ctagatcata 480
tattcagtaa atatgtttgt agctttattt caatccccca attcattgag ggttgaaaca 540
atttgaatgg tttgagtgta gaagctaagt tatttctgta gaggctaagg gcatttatac 600
caagatatgt tagacttgtg gttcctgtta accattgctg tagacaatag gaattactgt 660
atatccacat tttaattttt aacatcattc tgtc
                                                                694
<210> 735
<211> 126
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)...(126)
<223> n=A,T,C or G
<400> 735
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cgaattcggc acgagtctct ctctctct ctctctct ctctctct ntctctctt 120
                                                                126
ctctct
<210> 736
<211> 165
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)...(165)
<223> n=A,T,C or G
<400> 736
cagaagcett taaaceggtt ngaceagaet teaggeetgt gegeteaate gtggagaate 60
tcgtgccgaa ttcggcacga gtctctctct ctctctct ctctctct ctctctct 120
                                                                165
<210> 737
<211> 125
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)...(125)
<223> n=A,T,C or G
<400> 737
ggnagcccct ttaaccgttt gtccagactt caggcctgtg cgctcaatcg tggagaatct 60
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tctct
```

```
<210> 738
<211> 137
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)...(137)
<223> n=A,T,C or G
<400> 738
ggagnenett gancaggatg accgaettea ggeetgtgeg eteaategtg gagaateteg 60
tgccgaattc ggcacgagtc tctctctct tctctctct tctctctct tctctctc 120
                                                                   137
tctctctc tctctct
<210> 739
<211> 970
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)...(970)
<223> n=A, T, C or G
<400> 739
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cggaattcgc ggccgcgtcg acggcccttn gtgccactag ntctttcatt cttccccccc. 120
atcaatcagt gaacttttta gcctactcaa agctttgctc caatgcatag gatttatgat 180
tgtggggatt tccagataat ataaatattc aacatgaata ttttaaatta aggcatgaga 240
catttttcct aactgagcat agccatgaac ctctcacgtc tgttcctctg tgtcagtttg 300
tancactgaa tacagcagcc ctcctaaaag tccaggcagt gcacaggtct tgacatgatg 360
aagtgacgtg ttgctatggt gattttgcag ctggccaaat agtcactggt tgattttacc 420
cagcaggaga tttttgcaaa aatttcctgg gtgagagtga aatcaaactc ctattttgnt 480
tctcctctgc aagctgnagt taagatggat taatgagtac ttttagatta attaactctg 540
aagagaaaat gggagaaaag tgaggaaggt tgttggcaga agtcattgct ggaatccttc 600
tgaagggagt actgacttca cttgcaaaga cnagagacta naagacaatg aagttaaact 660
tggcctgtct ctcatatgat agatgctgag agtcaggntc agggaaattt aattctgtca 720
tacgcatatn ggattatgtg gtcatggatt tgttggcact aaccngcctn taatcagnat 780
aagaaaagtg ttttggtaga naaagaaaat tatggcccag aaaaacctgg aanacttgga 840
aaaaatgntn gggggccttg ggtggtggtc tnaaaanacc ccctggggat ntttaaacca 900
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<210> 740
<211> 739
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)...(739)
<223> n=A, T, C or G
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<212> DNA

<213> Homo sapiens

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<400> 740
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tgccactagt tettteatte tteccencea teaateagtg aactttttag eetaeteaaa 120
gctttgctcc aatgcatagg atttatgatt gtggggattt ccagataata taaatattca 180
acatgaatat tttaaattaa ggcatgagac atttttccta actgagcata gccatgaacc 240
totoacgtot gttoctotgt gnoagtttgt agcactgaat acagcagcoc tootaaaagt 300
ccaggcagtg cacaggtett gacatgatga agtgacgtgt tgetatggtg attttgcage 360
tggccaaata gtcactggtt gattttaccc agcaggagat ttttgcaaaa atttcctggg 420
tgagagtgaa atcaaactcc tattttgttt ctcctctgca agctgnagtt aanatggatt 480
aatgagtact tttagattaa ttaactctga agagaaaatg ggagaaaagn gaggaaggtt 540
gttggcagaa gtcattgctg gaatccttct gaagggagta ctgacttcac ttgcaaagac 600
aagagactan aagacaatga agttaaactt ggcctgtctn tcatatgata gatgcttgag 660
agtacaggnt cagggaaatt ttaattctgn catacgcata ttggattatg tgggtcatgg 720
ctttgtttgg cncctaacc
<210> 741
<211> 1171
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)...(1171)
<223> n=A, T, C or G
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atcagtgaac tttttagcct actcaaagct ttgctccaat gcataggatt tatgattgtg 180
gggatttcca gataatataa atattcaaca tgaatatttt aaattaaggc atgagacatt 240
tttcctaact gagcatagcc atgaacctct cacgtctgtt cctctgtgtc agtttgtagc 300
actgaataca gcagccctcc taaaagtcca ggcagtgcac aggtcttgac atgatgaagt 360
gacgtgttgc tatggtgatt ttgcagctgg ccaaatagtc actggttgat tttacccagc 420
aggagatttt tgcaaaaatt tcctgggtga gagtgaaatc aaactcctat tttgtttctc 480
ctctgcaagc tgtagttaag aagggattaa tggagtactt tttaagaatt aaattaacct 540
cttgaaagaa gaaaaaatgg gggaagaaaa aaagtggaag ggaaaagggn ttggttttgg 600
gccnaaaaaa aagttccaan tttnggcntt ggggaaaaat tccccntttt ccttggnaaa 660
aggggggnaa ggttaancct tgggaacctt tttccnncct tttnggccca aaaggggaac 720
ccanggggaa agaaccttta ggnaaaggaa acccatttgg gaangggttt naaaaccntt 780
ngggcccccg ggccctcctc caanaaggga aaaaaaaagg cctggaaaan gtaccagggt 840
ttcangggna aaanttaaaa ttcttggcca atancnccat aattgggaat tatggggggg 900
ccatgggctt ttggtttggg cncttaaccc cgcnttttaa attcaaanna aaaaaaagng 960
gtttggaaaa nnaaanaaaa aaaattnaan ggncccnaaa aaaaaccctg gaaaaccttt 1020
ggaaaaaat tngnnggggg gccntttggt tgggggggtt tnaaaaaacc ccctnggggg 1080
ttttttaagc ccaaaagggg gggaggggna aaanggtncc cttnttttt ttttnngccc 1140
                                                                   1171
cccttgggga atggnttant tcanggggcc c
<210> 742
<211> 739
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<220>
<221> misc feature
<222> (1) ... (739)
<223> n=A, T, C or G
<400> 742
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tgccactagt tctttcattc ttccccncca tcaatcagtg aactttttag cctactcaaa 120
gctttgctcc aatgcatagg atttatgatt gtggggattt ccagataata taaatattca 180
acatgaatat tttaaattaa ggcatgagac atttttccta actgagcata gccatgaacc 240
tctcacgtct gttcctctgt gncagtttgt agcactgaat acagcagccc tcctaaaagt 300
ccaggcagtg cacaggtctt gacatgatga agtgacgtgt tgctatggtg attttgcagc 360
tggccaaata gtcactggtt gattttaccc agcaggagat ttttgcaaaa atttcctggg 420
tgagagtgaa atcaaactcc tattttgttt ctcctctgca agctgnagtt aanatggatt 480
aatgagtact tttagattaa ttaactctga agagaaaatg ggagaaaagn gaggaaggtt 540
gttggcagaa gtcattgctg gaatccttct gaagggagta ctgacttcac ttgcaaagac 600
aagagactan aagacaatga agttaaactt ggcctgtctn tcatatgata gatgcttgag 660
agtacaggnt cagggaaatt ttaattctgn catacgcata ttggattatg tgggtcatgg 720
                                                                   739
ctttgtttgg cncctaacc
<210> 743
<211> 610
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)...(610)
<223> n=A,T,C or G
<400> 743
ctgtccttat ttctttagca aaaatttccc aagagaagaa ttgctgggat aatgcacatt 60
taaatttttg atagacattc ccaaatatta tacctgtttt tgagaccttt aattcctgtt 120
gtcaaattgc cctatatatg gagtaataaa cacgatttaa agaaatgagg actaaaaaaa 180
gattatatat aacccaacat aaaggcaacc tcttaggcgt tgacagaaac tgacaacttt 240
ttatctgtgg gtgcgatcca ttataagtaa cctgagcacc ttatttttc tttttaaact 300
ctaggtagga tacccgaggt ccacaaattt ttcataagaa atatttttc tctgccctat 360
gagattttaa aaaatattat actgcttcaa ttgcatcaaa agaaatggac cctaatatct 420
atgatgaagg atttggagtt agaagacctg agtttcaatt ttggcatggc tgtttgtcta 480
gctctgngat cttggacagg tcaattgact tggcttaatc ttctcatcca tttagnggag 540
acagcaccac tattcacagg actattgncn gaattaccag acaatagcat aggngaaaat 600
                                                                   610
ataangcctt
<210> 744
<211> 127
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)...(127)
<223> n=A,T,C or G
<400> 744
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<212> DNA

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gcacgaggga gagagagttn gagagagaga gagagagaga gagagagaga gagananaga 120
gagagag
<210> 745
<211> 458
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)...(458)
<223> n=A, T, C or G
<400> 745
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ggaagetggg ctacgteetg eccaggteag cettaggtta agggetgeet gggggaggga 120
acttectggg cettegggte tetgtgeact ggggtggete etgtggeeca gaatgeeetg 180
gagaagggtc ctactggaag cgaaggtgca gggcagcagg gcctgaggcg caggagctgg 240
tggaggctcc cagcacaggt cgccgcccca gtcacatcac tgctgatggt ggggggactt 300
ggggagtttc ccccgagaat gggaggtctc acagtccccg tgctgcaatg ctgtcggtgc 360
actgngncng caatgtgctc atggncactt gctttttctc tgtggccccg gccgatttat 420
                                                                   458
ccagcanngc acceptette tneteteegg anaaagee
<210> 746
<211> 893
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(893)
<223> n=A, T, C or G
<400> 746
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gaccccgtca tagagtaagt catcgataga gcatttgctt gatggggact tccagaaggc 120
canngaaagt cctgccgact tcctggggaa gcccatccgc acgtggggtg agggtcccca 180
natggaagca gctgtgtatg cagggagggg gcagaggctg ctgccaatgg gcatgtccct 240
tacctgaaag ggccacctct ccaggtgaca tgtcctgggg gagccggggc cgtctgctcc 300
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ggaccaaggt ggccttggac aaaactctct gtgtttgcca agcacccaat cggacacaga 420
gagtcaacca caccccagtc acatggtgtc cacacngcag gggtcaagga ggcccggccc 480
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tcgagacagg aagggagtga cctcctcccg gcggcatcca ggctcngctt ctccggagag 600
gagagggggc tacttgctgg ataaancggc cggggccaca gagaaaaagc aaggtgacca 660
tgagcacctt gcaaacacag tgcacccacc agcatttnag caccngggac tgtgaagacc 720
teceatttet teggggggaa aenegeecaa ngtteeecee acenteaeta gtgnattgtg 780
acctgggggn cgggccgacc cctgtngctt gggnnagccc tccncccagg tttctnnggc 840
ngcccnttaa nggnccctng nttggcccct tggccncctt tncgcttttc cca
<210> 747
<211> 738
```

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<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(738)
<223> n=A, T, C or G
<400> 747
gatatcccgg gaattcgcgg ccgcgtcnac gaagcacaga cctgngccct gctctcatgg 60
ggcagactgc catttgtcat tnattactga aggaaaggga tcctcagttt gcttgtggac 120
atttcaaatt tgaggtgaga gttggataag taagaataaa gctgctcttc aaagagatga 180
atatagaaaa agaaacaaga tacagncttg gcagtaaggc tgggaggaag gggaaaaggt 240
aataaagaat gaaagagtga gaaatgtgag caggagctga acacagaaaa gttcagngac 300
agaagcanaa ggagggaaga agggaggagg gtccctttca cagaggctca cgaggatgct 360
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tanaaatttg gatacttact gatcctacat atgtaacagg gagagaaggt gaatttcaaa 480
gcantaaatt gaaaaattgt tcacaatttc attttttaaa aaaagggagc taacagaaga 540
agaggttaat gtggtaatta taggatgnct cttgcgacac atgaatgnat ctggtatcat 600
ctgagtggga ggggagctgt cttcctgacc caaaaggatc ctttcgttan ccngnactta 660
ngtcccaaaa cctcaccacc ttggagaaat natttccttt tgggggtntc attaaancct 720
                                                                   738
tttggncccc gcaaaagc
<210> 748
<211> 647
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)...(647)
<223> n=A, T, C or G
<400> 748
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aggtcgagag taagacgggc tattagtagt cgcatcggag ttatttgtga aaacctggtt 120
agggcctctg tctccgctgc gctcgcctaa attggtatgg ctcgacttgg aaacacggtt 180
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aaaagataaa gtatacatcg tttagcggtc ctcggaagcc ttcggcttta atgccaagga 540
gteggaagea tegteggega gtaataaact eeategegee gagaetatet acgaegeeet 600
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ccttaanatc cgtaaattac tcccggaaag agtatttagg cggctct
<210> 749
<211> 642
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)...(642)
<223> n=A,T,C or G
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<400> 749
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tttggttctg ttgagcgtag tgtgtttgaa ggttagcgtt cgtgtcttgc ttgtggtttg 180
gtgtttaggg cgggtgggga ggttgttgtg tagctgttgt atgtcatatt gttggtgttg 240
ctgccctgtg ctgtttgtcc ttggttattg tggttgttac cccgcctgtg tggaagtgtt 300
gtggcagggc gggaatttaa gtgggagagt tgtgggaccc gtggttgttg ttacgttgct 360
gcttttgtcg tgggcggtgg cggcgcgtct gataattaga attggatacg gagtgtataa 420
tacttctagt aaatggggac ctagtgcttg acttcccgga atagggatct atgcgaagtc 480
cttaggatag tctttgataa gtttaacgcc cacgacccta aaattataca cgattagacg 540
cataacgact cctccaggaa agataaagaa tctcacatat agaacgggac cccatacacg 600
tcggatagga aacaagagaa ctaattttng ttaaaaagac tt
<210> 750
<211> 639
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)...(639)
<223> n=A,T,C or G
<400> 750
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gtatagatgc cgattggtcc cgacgagcgt cacgataaat tcggtagttt cgcccttttt 120
agaaggeget agtactegga actteactte ateteggtag tttactttgg egtatatage 180
cttctccctc gaagactagc cgtcacattc gttccctagg aatcgtttct gcccctaaga 240
atccgagagc gagatcccga aactagagga accttagaag agtcgtattt ccacaaggac 300
cccacagtca ttccgggaaa atccctagga ccatacggtt aggattcccc cggaacccgg 360
agcaaagctc atgatttccc acaccgcgag agcgcctata accctatccc atttcttcgg 420
gttatcgagg atattacgat caagccgaga gaaccgctag aaccgctttc ttcgctttct 480
cacggaacct ataagtagaa agagaaactc aggtcttaag ggggcgcttc ggctaacgaa 540
acttctactt acgaagaga tatctagaca ttaagtcata aaaatccact acgcacctcg 600
                                                                   639
tgtacgatat catcgggagc ggttcataga cggtgtccg
<210> 751
<211> 637
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(637)
<223> n=A,T,C or G
<400> 751
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aggcagetet gageeceece ecceeceece ecceeceneec ecceeceta ggnggttggg 120
aanacggtgg atacctaaat cgagtgngtt cattaaaagt agttgattac nccctaaaat 180
aanaanaggg cttcgtcggg anaaatcggt aagganaagt ctttntggca tcataanaat 240
actggctcgg gtcctaanat ntttaaggng gtcnccgagg gtnttcatac cgataanaaa 300
cgttttccta tcggcaacgg gcttacctga gggnggactt ctcncggngc ggngattnan 360
```

<211> 721

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aattntcctg aaaagrgtta taanaatacg cncgcatatt cgctttttcg tcctagggat 480
gcttaaatgg cgatactgct atagcgggtg agcgttggtt ctcgagnaan aaagcgtgtc 540
ctaatgcgtc taaggnttta aggncgttgg tttaaaaata nccttagaaa cctcgaggcg 600
gatactggtt tntttttaac gaaacaaagc accccnn
<210> 752
<211> 644
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)...(644)
<223> n=A, T, C or G
<400> 752
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ttgcgagttg ttggtgtgtc ctgtcgttcg gtggttccct tttgagttga gtttgtcctt 120
tgaggttgtt agctgctgtt cgtttgtgtt cgtgtagtgc tttgggttga gagggttatg 180
gtggtggtta cggtgtattg tcgcccgtgg tcgcggggtt ggggtggtcg tcggttttgt 240
ggttcatagt agtcttctgc gttcggtggt gcgggtttgg gtgagtagtt tcgttcttgg 300
atgtcccatt gacccgccat aatctaagta agggttagta gaaacctctc cccgatagac 360
acaaccgtcg tccactaaag acctcgcctc tgatttttaa aaggacccga aaaacatccc 420
ttcaacggaa aaaacggaaa aaaagtcagc gaattcaaag aagccacggg agagaaaaaa 480
gaactaaagt tagtccgtca ttatatgtct cctcggagga ggaagcggcg gtggcggaaa 540
atgaggcggt aagaaagacg acctctatcg gcggcttang ccctaaaagg gcgatacctt 600
                                                                   644
acgggatgat aaggacccta ggacgcctcc ttctcggatc gtcc
<210> 753
<211> 635
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)...(635)
<223> n=A,T,C or G
<400> 753
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aatcageteg acceeecce ecceeect ecgaageaga geecaaceea aagteeaceg 120
actacccgag taaactctcg gagggtagaa taagaaggag taggtcctag ccaatagaag 180
tagttccgag ccgttaggac agcggacgga acattnaaga aagagcctat attagggagg 240
aagtaacgtt cctctttcgg agctctttaa ggggtagtcc cagaacaagg gaagaggacc 300
cgtcggctat tgcccgtcga tacgggctct cacggngagc ctaggttcga ggatagggcc 360
gctcgtaaaa ttatacggtt tccgagaaac gcttccgtag accgggtcct aaatcgtccg 420
gagtattngg agagggatcc ttcggaccct agggacagag agaggagaac ggaggttaca 480
ggaggagaac gtntcctcnc tagttttctt tangtcgaaa aatttcttac cgatagggtt 540
cctagggtcg gngaatttac ggttcgaaaa acggtagtnc ctaanggntg ntattngggg 600
                                                                   635
tagtatcggg tcgtttacaa ntcgtccgtc ttntg
<210> 754
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```
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(721)
<223> n=A, T, C or G
<400> 754
accggattng ttnctgagcg cgtgactgct aataaaaaag atggantgcc atctttttt 60
ttnccttgct ttatatatcc agcagcaaaa caaaattgtt ctgcngggct ataaaatttg 120
gettgtgagt entgtacaca actcaggagt gtgacacage taccagettt cetectaact 180
ctcaagggaa gaaaattcaa gttctgtcta ggctcactct gtaaagtggg aaacttgctg 240
gttttgtagg ctttttttcc ccttctttcc ctctctcagc ttctccctgc ttctcagaan 300
atggagttgt gatgcctgca acttaccaaa tttatctatg aatcagattc cagtgggaga 360
cccctaaagc agagggagaa taaggagttc tccccatgat ggaaaatatc caaagacaag 420
gtttcatgga gcaaagaatt ctggctagat ttggtttgta agtggatccc tccccactgc 480
gtgtacactt tatctgtctc tttgcttctt ccccaccctc tttcccagct ctctctctgt 540
ctctctcttg ntcccctgac ccttttttct tcccantgca tacttttttn tttccctttt 600
ttaatettet atantettaa neetaeeaan gggeeetent gannaatttn teaeeeetga 660
ataggggatt ctntangccc tgagaatttc nttatcanaa aaatatttt ttaaagcatt 720
                                                                   721
<210> 755
<211> 721
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)...(721)
<223> n=A,T,C or G
<400> 755
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ttnccttgct ttatatatcc agcagcaaaa caaaattgtt ctgcngggct ataaaatttg 120
gettgtgagt entgtacaca actcaggagt gtgacacage taccagettt cetectaact 180
ctcaagggaa gaaaattcaa gttctgtcta ggctcactct gtaaagtggg aaacttgctg 240
gttttgtagg cttttttcc ccttcttcc ctctctagc ttctccctgc ttctcagaan 300
atggagttgt gatgcctgca acttaccaaa tttatctatg aatcagattc cagtgggaga 360
cccctaaagc agagggagaa taaggagttc tccccatgat ggaaaatatc caaagacaag 420
gtttcatgga gcaaagaatt ctggctagat ttggtttgta agtggatccc tccccactgc 480
gtgtacactt tatctgtctc tttgcttctt ccccaccctc tttcccagct ctctctctgt 540
ctctctcttg ntcccctgac cctttttct tcccantgca tacttttttn tttccctttt 600
ttaatettet atantettaa neetaeeaan gggeeetent gannaatttn teaeeeetga 660
ataggggatt ctntangccc tgagaatttc nttatcanaa aaatatttt ttaaagcatt 720
                                                                   721
а
<210> 756
<211> 873
<212> DNA
<213> Homo sapiens
<220>
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<221> misc feature
<222> (1)...(873)
<223> n=A,T,C or G
<400> 756
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tcagcaatta ggctgaaagt caacgccaag ctggcgggca agggctggtc tgagtagagg 180
ttccctaggc aggcaagaga gagactccca ctcgatactc ccagctcggc aactgcctga 240
atgccaatga gcactcatta taacccgccc tattttatag gatttaattt tacacttcag 300
gcttaatcag tctgaaagtt aaactgacag tgttaagtta cggaatcaat gacatttagg 360
ctttatgact ttgtagctga atatctatgg gctatatttc cattctaaca gtgatatcct 420
gttccagaat ctcattcttt ggtgatggca ctttctagtg gagcagtcat ggtaacagtc 480
cacacccatt accatgtggg tgctttacag catactgacg gaaggactga ggagccaccg 540
gagcaggagt teeteteagg gaggaegetg acaetteeae agetgeetan gtatgggeae 600
ctgatgccaa cgaanaaccc aaagcgctct cccttccaga tggaagctgc cccacactgg 660
gctgacagca tctggagctg ctctggctca aatcccggaa tcgcacanct cctancgggg 720
gcgtttanag atcctcnggg ccagctaccg accacttttg acaagggnct taggagcgat 780
aactagnctg gcgcgttaca cncggatgga acgtcttgga cttgagacct cttgggggan 840
atggcncccc caaataantt gggaaaantn ggg
<210> 757
<211> 782
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)...(782)
<223> n=A,T,C or G
<400> 757
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ggatttgaga ccaggagaca gctccagatg ctgtcagccc agtgctgggg gcaggcttcc 120
atctgtgaag tggagaggcg ctttgggctt cttcgttggc atcaggtgcc catacctagg 180
gcagctgtgg aagtgtcagc gtcctccctg agaggaactc ctgctccggt ggctcctcag 240
teetteegte agtatgetgt aaageaceea catggtaatg ggtgnggaet ggtaceatga 300
ctgntccctt aaaaggtggc cttcccnaag aaaggagaat tcttggacna gggatttcac 360
ttgnttagaa atgggaaaaa ttacccatta gaattttcgn ttccaaggcn tnaagnccta 420
aaaggccttt gattcccgaa ccttaaccct gggcagttaa cctttcaaac gggataaacc 480
ctgangggga aaatnaaatc ctttaaaaaa gggggggttt naaggagggc tctttggctt 540
tcaggcantt gccaacctgg gaaattcana ggggaagtnt ttttttttgc ctgcctaggg 600
aacctttact taaacnaacc cttgnccccc catttggggt tgactttcan cctaattgct 660
gaaaggaccg ggccgntttt gntttccttt gncccaaagg naaanaaacg ggtgccantt 720
cccangggat tanttcccga aaatttggnn aatttttntt tgnaactttt tgggtttttt 780
                                                                   782
CC
<210> 758
<211> 647
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
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<222> (1)...(647)
<223> n=A, T, C or G
<400> 758
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gggaagagcg ccgtcggtcc gagtacagta tggagtagta tagtcttcgc gccttctcgg 120
geggeggggc tattetetee aaaggeagag gteectagte gaeetegete eeetaggtta 180
ggaacagccg tcgaatattt taggttcgtc gaggctttct tccgagctct acgcctaagt 240
agetecgega geaaagtate ggteatttte ecetateeat eacteceeta agtacgeete 300
attattccgg aaggcaagag gccagcattc ctccttagag tagagggtag gtacctccgt 360
cgcgtgccgc gaaagggcag agcttcgtgt cttccctccg cagcagctta acggtctacg 420
taggcgttct cgatcttttc acgggaatcg gggtccggga gggcggcgga aaacgtcgac 480
gtctcggtca ccgtcaccgc cccgaacaac tagcggcttt ccgctttcaa ctgaggaacc 540
ccgcacccct cattagcgct tacgaaatcg gggangtgat tgcgccaatt cgttagcctt 600
                                                                   647
cgataattat tctctattag cggtcctatc tcgcgctttc gatttat
<210> 759
<211> 657
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)...(657)
<223> n=A, T, C or G
<400> 759
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gggctctata gaaagcctct tgtctttaga tacgggcttt ctggtccttc gttctggaag 120
tgtagtagta ggtactgcgg gaaggcgaag agtcctttca aggacgattt acttaagttg 180
gcttattcta tagttccttc gggacataag gtcggtacga tctatactgc gtgggaagct 240
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atattattta cggcggccgc gggtaccgcg ggtcatgcgg aaattttctg aggttcttgg 360
attectaaga tegeteeegt egagtataet agegaegaae gtaagagtge eeteacaaga 420
accggtacaa actcaagaag aagttcccat taagcatcgt aagaaacggt aggacgagga 480
cggtaagaag taatcggaga aaggatccta gtngttacga agaagcatcg ttnagctact 540
ttgcgctacc gtttatattt agacgtgttc cgtccttctc cgtgtttana aaaaaggttt 600
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<210> 760
<211> 644
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(644)
<223> n=A,T,C or G
<400> 760
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ggaaaagaag taagcctcga agcctatctc cgaccgtatt tatttcgcag aagacggaac 120
tacggacgtc gttaaccccg agtagccccc gtaagaaagg actaaagcga atggaaaagt 180
cgggaattcc ggcggagggg cggcgattac tgaaaggagt aagagtaaga ctattgcgat 240
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acttgaggcg ttccctctta aaaggcaccc gaaacactct attaaaaaac acccgaagaa 300
quacaactca tgcgatcggc cgtgtgcagc cgtcaatagt aaagagagcc atgaaccatg 360
ccatccttag accaattagg atgaagaaga ggaggaagat gaggaccaaa ccctacccac 420
teggaaaacc eegcaegage eteegaacaa aateegggaa ttaaaaegge ggeecaette 480
cgcactctcg tagcgcggac cgaatagaaa accggaaact acagctaaag ggtcctttcc 540
ggcctgttat ctacccaccc gcaatccgat cctcccccc cctcgtccaa aaaccctaac 600
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<210> 761
<211> 647
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(647)
<223> n=A, T, C or G
<400> 761
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tcattataag aagtggaagc acgagccggg gtgtttagtc gttaatatta agaccggttt 180
ttgttgtact tatatagctt gcgcgtgggg aggcaataag aaacattgcg tttcgaggcc 240
ggatgcgggg aaccetette ggggtetaga gegeegeate tgcaaaataa ggaetaetga 300
cgccgctcat aacgtactca acaatgagtc ggcctgcatt aagatttcgg cgaagaaccg 360
tactgcgtct actgatagta tattgcattg atagcggcat gagctttatc acgtgtcgtt 420
ttcgggttgt aagaagggag ttaagtcgat cttcgaggaa gaagagaccc caaataaaaa 480
atgactcaaa aaaacctaga agaaacacga cgaaaggaaa aagaacgtta aaactagtag 540
ctcttcggan gagtagcctt agtagggtaa gtcctccgtg cgtactgtcc taaggtttgg 600
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                                                                   647
<210> 762
<211> 628
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)...(628)
<223> n=A, T, C or G
<400> 762
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tgtgttccct ttattcgctt gtattaatat ttgcgtagtg gattaaacaa atacttggtg 120
ttgactgtca gtcttagagg actgactaga agtagttttc atttggggct caggaaatac 180
ctactttata tttctagcta attaggaaag tcatttttca gttaggttgg tgttttggtt 240
caggcactcg ctagctagat gacctaacat gctacttaat ttctgagtgt ttgtgtccat 300
ccctgtagga ttgttgcggg gttaaatgaa attgtgtata tttgtaaagc atttacctca 360
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gtgtcagatt agcaacctat agctacttct aaagctgctg ctgctttctt tgtttagggt 480
taggaagaaa catgctggac agtttgccaa atgagagtta catgatgtgg cttgtgggaa 540
cattctaact tggaacttgc ccatttccag gactttgngg ttcanagatt tttggggata 600
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gatgtaaggg ttaaaaaaaa cngaaaac
```

```
<210> 763
<211> 147
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(147)
<223> n=A,T,C or G
<400> 763
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gaaaagctaa ctggataact tacagcatgt ttctgccaat aatctcttan aacaggcctc 120
                                                                    147
tttttttat gcacaccacc ttcnggc
<210> 764
<211> 146
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)...(146)
<223> n=A,T,C or G
<400> 764
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agagttaggg ggactgttag aacagagaaa ganatcatgg ggttgggttt gagtctgatg 120
nnnaactggt gccgnntgct cagtat
<210> 765
<211> 129
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)...(129)
<223> n=A,T,C or G
<400> 765
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ccagtgtggg nggaattcca ttgtgttggg gcaggaggng ctttgngtac ngtgcggctg 120
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nagaggcgg
<210> 766
<211> 175
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)...(175)
<223> n=A, T, C or G
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acattctgtg ngtgatgagg tgtatattcg anganctcta tcnccanagt actct
<210> 767
<211> 602
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)...(602)
<223> n=A, T, C or G
<400> 767
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cctggtttgt tttcagtgtt taatcctatt agtatcagca ggatataggt caggatatca 120
ggtgcagaac ctgtggaatc agccaatttg gcttgctcat ttactttaat aaggtcccat 180
aatgagtgag agtacaaagt tcaagccctg ttgagggtct gcattaaact ctcagaagta 240
tttagagtgt gccaggagcc gcgaaggtct ggttcgggtg gtggcgggaa ctgtattaga 300
gtgctaggca cggcgcgaca aagtctgtcc aacccaaaac ggtgctgagg cgttgggtgt 360
gagetecagt acteagaaaa geateteage aggtaeteaa eagateetea ggggettggg 420
ggcccagcac tggcagtgag ggcatgaaag acataaaagg gcactacctg tgggtatttt 480
ctgttctcca aggaggaagt agcaaaaatt aggacgctgg aatatcctat gttgtagcaa 540
teccagaaca actgatgete aacaaatace acacaaaaca aatttttaa aatttaatet 600
                                                                   602
ta
<210> 768
<211> 671
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)...(671)
<223> n=A,T,C or G
<400> 768
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tegeggeneg egtegacaaa aatactgeta aagtaatatt titatagatg actatitgee 120
ttggggccag gaaaagcagc tggagttatt cacttagtac catttttaca tactaacttt 180
geetttteca tgettgettg atgeggettg cageactgaa gaacagttte aattgetage 240
caaccagaga gcatgatcaa accaaacaag ttccctgttt caggaaaaac aggttttagg 300
taactgaagg gttaccagtt actgattcca caatcttctc tgtaaaanat ttctgcctat 360
tatgcagact gggcggcttt aaanntggta aaactatnaa atacccatac aatattttaa 420
nggggccccn ttatnaagct tttcaggcct tcccctttcc atagcattgg tgggatacaa 480
gaaaccttta aacagcaacn agctatcnag gcccaaaagg aaagtaattn tgatttttta 540
nagattccgn aacgaaaaaa tggctgggtt caaatacnac cttcttttta aaatggnttc 600
cttattaaac ntttttttt tttaatttta ccccatggtc ntgatnttng ngcttccgcc 660
canaaaatng n
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<210> 769

ن

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<211> 877
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)...(877)
<223> n=A,T,C or G
<400> 769
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ngggggaatt cgcggccgcg tcgacctcta tacctttgnt catgcagctt cctctgactg 120
ggtttgttct tcacttggct aacccctctt ttacttaagc acaccttgaa cattccctcc 180
ttccccattt ccccgcagng cccctaatgg acatacttct gaataacaca ggtggtattc 240
cttccttgtt ggaacctcct ggaggaagag acagatgatt aacaaatcct tccatcaacc 300
cctttgacca tgacatcaac agtgctccaa attatggggt accgtattag cctatgtcta 360
tcttgatcag aatccttacc tcggtgtatt gaaattatct atttcgtgcc tgcctcttta 420
aagtcagggt ttgccttatc tattgtctaa caccatgcag taggtaacat gcagtaggaa 480
acatggcatt aaattatttg ggttcaaatc ccagttatgg tgtgtaaatg cctaccaggc 540
cgtgaggcac ctgctaagca ggttgcacgc atcatttgaa ttcacaccac ccttttgcaa 600
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aggattccca ccaaggcctc anggcccagg tccanggacc atgtctgttg tgacaactgg 720
agtgcatttc atatcccctn ctctgngggg naaggtccct cncgnggaga acnnttaaaa 780
caatcatntc tngggggntt aatgettett neceeagtgt ggtneaetge ngeeaegagt 840
cccanccact agtcccangt ctgtcatgaa ccanccc
<210> 770
<211> 874
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)...(874)
<223> n=A,T,C or G
<400> 770
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Суз	Asp	Thr 115	Asp	Ala	Glu	Ile	Leu 120	Tyr	Glu	Leu	Leu	Thr 125	Gln	His	Trp
His	Leu 130	Lys	Thr	Pro	Asn	Leu 135	Val	Ile	Ser	Val	Thr 140	Gly	Gly	Ala	Lys
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Gln Ser Gln His Met Glu Gly Thr Gln Ile Asn Gln Ser Glu Lys Trp 65 70 75 80

Asn Tyr Lys Lys His Thr Lys Glu Phe Pro Thr Asp Ala Phe Gly Asp 85 90 95

Ile Gln Phe Glu Thr Leu Gly Lys Lys Gly Lys Tyr Ile Arg Leu Ser 100 105 110

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His Leu Lys Thr Pro Asn Leu Val Ile Ser Val Thr Gly Gly Ala Lys 130 135 140

Asn Phe Ala Leu Lys Pro Arg Met Arg Lys Ile Phe Ser Arg Leu Ile 145 150 155 160

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Tyr Gly Leu Met Lys Tyr Ile Gly Glu Val Val Arg Asp Asn Thr Ile 180 185 190

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Thr Lys Asp Ser Lys Ala Thr Glu Asn Val Cys Lys Cys Gly Tyr Ala 50 55 60

Gln Ser Gln His Met Glu Gly Thr Gln Ile Asn Gln Ser Glu Lys Trp 65 70 75 80

Asn Tyr Lys Lys His Thr Lys Glu Phe Pro Thr Asp Ala Phe Gly Asp 85 90 95

Ile Gln Phe Glu Thr Leu Gly Lys Lys Gly Lys Tyr Ile Arg Leu Ser 100 105 110

Cys Asp Thr Asp Ala Glu Ile Leu Tyr Glu Leu Leu Thr Gln His Trp 115 120 125

His Leu Lys Thr Pro Asn Leu Val Ile Ser Val Thr Gly Gly Ala Lys 130 135 140

Asn Phe Ala Leu Lys Pro Arg Met Arg Lys Ile Phe Ser Arg Leu Ile 145 150 155 160

Tyr Ile Ala Gln Ser Lys Gly Ala Trp Ile Leu Thr Gly Gly Thr His 165 170 175

Tyr Gly Leu Met Lys Tyr Ile Gly Glu Val Val Arg Asp Asn Thr Ile 180 185 190

Ser Arg Ser Ser Glu Glu Asn Ile Val Ala Ile Gly Ile Ala Ala Trp 195 200 205

Gly Met Val Ser Asn Arg Asp Thr Leu Ile Arg Asn Cys Asp Ala Glu 210 215 220

Gly Tyr Phe Leu Ala Gln Tyr Leu Met Asp Asp Phe Thr Arg Asp Pro 225 230 235 240

Leu Tyr Ile Leu Asp Asn Asn His Thr His Leu Leu Leu Val Asp Asn 245 250 255

Gly Cys His Gly His Pro Thr Val Glu Ala Lys Leu Arg Asn Gln Leu 260 265 270

Glu Lys Tyr Ile Ser Glu Arg Thr Ile Gln Asp Ser Asn Tyr Gly Gly Lys Ile Pro Ile Val Cys Phe Ala Gln Gly Gly Lys Glu Thr Leu 295 Lys Ala Ile Asn Thr Ser Ile Lys Asn Lys Ile Pro Cys Val Val Val 310 Glu Gly Ser Gly Gln Ile Ala Asp Val Ile Ala Ser Leu Val Glu Val 330 325 Glu Asp Ala Leu Thr Ser Ser Ala Val Lys Glu Lys Leu Val Arg Phe Leu Pro Arg Thr Val Ser Arg Leu Pro Glu Glu Glu Thr Glu Ser Trp Ile Lys Trp Leu Lys Glu Ile Leu Glu Cys Ser His Leu Leu Thr Val Ile Lys Met Glu Glu Ala Gly Asp Glu Ile Val Ser Asn Ala Ile Ser Tyr Ala Leu Tyr Lys Ala Phe Ser Thr Ser Glu Gln Asp Lys Asp Asn 405 Trp Asn Gly Gln Leu Lys Leu Leu Leu Glu Trp Asn Gln Leu Asp Leu 425 Ala Asn Asp Glu Ile Phe Thr Asn Asp Arg Arg Trp Glu Ser Ala Asp 440 Leu Gln Glu Val Met Phe Thr Ala Leu Ile Lys Asp Arg Pro Lys Phe 450 Val Arg Leu Phe Leu Glu Asn Gly Leu Asn Leu Arg Lys Phe Leu Thr 470 465 His Asp Val Leu Thr Glu Leu Phe Ser Asn His Phe Ser Thr Leu Val 485 Tyr Arg Asn Leu Gln Ile Ala Lys Asn Ser Tyr Asn Asp Ala Leu Leu 505 500 Thr Phe Val Trp Lys Leu Val Ala Asn Phe Arg Arg Gly Phe Arg Lys 520 Glu Asp Arg Asn Gly Arg Asp Glu Met Asp Ile Glu Leu His Asp Val 530 Ser Pro Ile Thr Arg His Pro Leu Gln Ala Leu Phe Ile Trp Ala Ile 555 550 545

Leu Gln Asn Lys Lys Glu Leu Ser Lys Val Ile Trp Glu Gln Thr Arg 565 570 575

Gly Cys Thr Leu Ala Ala Leu Gly Ala Ser Lys Leu Leu Lys Thr Leu 580 585 590

Ala Lys Val Lys Asn Asp Ile Asn Ala Ala Gly Glu Ser Glu Glu Leu 595 600 605

Ala Asn Glu Tyr Glu Thr Arg Ala Val Glu Leu Phe Thr Glu Cys Tyr 610 615 620

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Leu Gly Val Val Asp Asn Asn Gly Asn Gly Ala Arg Val Gln Arg Val 50 55 60

Val Gly Ser Ala Pro Ala Ala Ser Leu Gly Ile Ser Thr Gly Asp Val 65 70 75 80

Ile Thr Ala Val Asp Gly Ala Pro Ile Asn Ser Ala Thr Ala Met Ala

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Phe Leu Gly Leu Gly Val Val Asp Asn Asn Gly Asn Gly Ala Arg Val 55

Gln Arg Val Val Gly Ser Ala Pro Ala Ala Ser Leu Gly Ile Ser Thr

Gly Asp Val Ile Thr Ala Val Asp Gly Ala Pro Ile Asn Ser Ala Thr

Ala Met Ala Asp Ala Leu Asn Gly His His Pro Gly Asp Val Ile Ser 110 105 100

Val Thr Trp Gln Thr Lys Ser Gly Gly Thr Arg Thr Gly Asn Val Thr 115

Leu Ala Glu Gly Pro Pro Ala Glu Phe Met Ile Arg Glu Lys Phe Ala 135

His Cys Thr Val Leu Thr Ile Ala His Arg Leu Asn Thr Ile Ile Asp 145 150 155 160

Ser Asp Lys Ile Met Val Leu Asp Ser Gly Arg Leu Lys Glu Tyr Asp 165 170 175

Glu Pro Tyr Val Leu Leu Gln Asn Lys Glu Ser Leu Phe Tyr Lys Met 180 185 190

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Phe Trp Asp Lys Ala Ser Glu Thr Pro Thr Leu Gln Gly Leu Ser Phe 50 55 60

Thr Val Arg Pro Gly Glu Leu Leu Ala Val Val Gly Pro Val Gly Ala 65 70 75 80

Gly Lys Ser Ser Leu Leu Ser Ala Val Leu Gly Glu Leu Ala Pro Ser 85 90 95

His Gly Leu Val Ser Val His Gly Arg Ile Ala Tyr Val Ser Gln Gln
100 105 110

Pro Trp Val Phe Ser Gly Thr Leu Arg Ser Asn Ile Leu Phe Gly Lys 115 120 125

Lys Tyr Glu Lys Glu Arg Tyr Glu Lys Val Ile Lys Ala Cys Ala Leu 130 135 140

Lys Lys Asp Leu Gln Leu Leu Glu Asp Gly Asp Leu Thr Val Ile Gly

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Lys	Met	Val	Gln	Lys 245	Gly	Thr	Tyr	Thr	Glu 250	Phe	Leu	Lys	Ser	Gly 255	Ile
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Pro	Val	Pro 275	Gly	Thr	Pro	Thr	Leu 280	Arg	Asn	Arg	Thr	Phe 285	Ser	Glu	Ser
Ser	Val 290	Trp	Ser	Gln	Gln	Ser 295	Ser	Arg	Pro	Ser	Leu 300	Lys	Asp	Gly	Ala
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Ser Gly	Arg 35	Leu	Lys	Glu	Tyr	Asp 40	Glu	Pro	Tyr	Val	Leu 45	Leu	Gln	Asn	
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Ile Ala Gly Gln Ile Lys Leu Pro Thr Val His Ile Gly Pro Thr Ala 35 40 45

Phe Leu Gly Leu Gly Val Val Asp Asn Asn Gly Asn Gly Ala Arg Val 50 55 60

Gln Arg Val Val Gly Ser Ala Pro Ala Ala Ser Leu Gly Ile Ser Thr 65 70 75 80

Gly Asp Val Ile Thr Ala Val Asp Gly Ala Pro Ile Asn Ser Ala Thr 85 90 95

Ala Met Ala Asp Ala Leu Asn Gly His His Pro Gly Asp Val Ile Ser 100 105 - 110

Val Thr Trp Gln Thr Lys Ser Gly Gly Thr Arg Thr Gly Asn Val Thr 115 120 125

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Gly Val Arg Leu Glu Gly Val Asp Arg Pro Pro Thr Leu Pro Ser Gln 165 170 175

Gly Ser Gly Trp Pro Cys Ser His Ser Leu Ser Gly Cys His Leu Met 180 185 190

Ala Asp Gly Ala Lys Ala Leu Gly Lys Ala Asp Gly Pro Trp Pro Tyr 195 200 205

Leu Phe Val Arg Arg Thr Asp Val Pro Cys Pro Ala Ala Ser Glu Val 210 215 220

Gly Gly Cys Ala Pro Ser Ser Trp Arg Ala Leu Ala Glu Val Thr Gly 225 230 235 240

Cys Ser Leu Gly Pro Leu Gly Leu Ala Gln His Ala Gln Ala Ser Val 245 250 255

Leu Leu Cys Tyr Lys Trp Ser His Ile Gly Glu Thr Ser Ser His

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Val		Gly	Val	Tyr	Thr		Leu	Cys	Lys	Phe		Glu	Trp	Ile	Glu		
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130

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Gln Arg Val Val Gly Ser Ala Pro Ala Ala Ser Leu Gly Ile Ser Thr
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Gly Asp Val Ile Thr Ala Val Asp Gly Ala Pro Ile Asn Ser Ala Thr 85 90 95

Ala Met Ala Asp Ala Leu Asn Gly His His Pro Gly Asp Val Ile Ser 100 105 110

Val Thr Trp Gln Thr Lys Ser Gly Gly Thr Arg Thr Gly Asn Val Thr 115 120 125

Leu Ala Glu Gly Pro Pro Ala Glu Phe Ile Thr Tyr Val Pro Pro Leu 130 135 140

Leu Leu Glu Val Gly Val Glu Glu Lys Phe Met Thr Met Val Leu Gly 145 150 155 160

Ile Gly Pro Val Leu Gly Leu Val Cys Val Pro Leu Leu Gly Ser Ala 165 170 175

Ser Asp His Trp Arg Gly Arg Tyr Gly Arg Arg Arg Pro Phe Ile Trp 180 185 190

Ala Leu Ser Leu Gly Ile Leu Leu Ser Leu Phe Leu Ile Pro Arg Ala 195 200 205

Gly Trp Leu Ala Gly Leu Leu Cys Pro Asp Pro Arg Pro Leu Glu Leu 210 215 220

Ala Leu Leu Ile Leu Gly Val Gly Leu Leu Asp Phe Cys Gly Gln Val 225 230 235 240

Cys Phe Thr Pro Leu Glu Ala Leu Leu Ser Asp Leu Phe Arg Asp Pro 245 250 255

Asp His Cys Arg Gln Ala Tyr Ser Val Tyr Ala Phe Met Ile Ser Leu 260 265 270

Gly Gly Cys Leu Gly Tyr Leu Leu Pro Ala Ile Asp Trp Asp Thr Ser 280 275 Ala Leu Ala Pro Tyr Leu Gly Thr Gln Glu Glu Cys Leu Phe Gly Leu 295 Leu Thr Leu Ile Phe Leu Thr Cys Val Ala Ala Thr Leu Leu Val Ala 320 315 310 Glu Glu Ala Ala Leu Gly Pro Thr Glu Pro Ala Glu Gly Leu Ser Ala 330 325 Pro Ser Leu Ser Pro His Cys Cys Pro Cys Arg Ala Arg Leu Ala Phe 345 Arg Asn Leu Gly Ala Leu Leu Pro Arg Leu His Gln Leu Cys Cys Arg Met Pro Arg Thr Leu Arg Arg Leu Phe Val Ala Glu Leu Cys Ser Trp Met Ala Leu Met Thr Phe Thr Leu Phe Tyr Thr Asp Phe Val Gly Glu 395 390 <210> 853 <211> 20 <212> PRT <213> Homo sapiens <400> 853 Leu Leu Pro Pro Pro Pro Ala Leu Cys Gly Ala Ser Ala Cys Asp Val Ser Val Arg Val <210> 854 <211> 60 <212> DNA <213> Homo sapiens <400> 854 ctgctcccac ctccacccgc gctctgcggg gcctctgcct gtgatgtctc cgtacgtgtg 60 <210> 855 <211> 10 <212> PRT <213> Homo sapiens <400> 855 Ala Ser Ala Cys Asp Val Ser Val Arg Val

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Ser Gln Leu

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Gln Glu Ser Gly Pro Val Ala Gln Ala Gly Val Gln Trp His Asp Leu 35 40 45

Ser Ser Leu Gln Pro Leu Pro His Arg Phe Lys Gln Phe Ser Cys Leu 50 60

Ser Leu Pro His Ser Trp Asp His Arg Tyr Ala Pro Pro His Leu Ala 65 70 75 80

Asn Phe Cys Ser Phe Ser Arg Asp Gly Val Ser Leu Cys Cys Ser Gly 85 90 95

Trp Ser Lys Thr Pro Gly Leu Gln Gln Ser Ala Cys Leu Gly Leu Pro 100 105 - 110

Lys Cys Trp Gly Tyr Arg His Lys Pro Pro His Pro Ala Cys His Ile 115 120 125

Leu Leu Asn Tyr Gln Val Ser 130 135

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Arg Ala Lys Pro Tyr Gln Met Leu Gln Gly Leu Gly Thr Leu Arg Pro 35 40 45

Leu Arg Pro Gly Val Ser Val Thr Leu Leu Gly Ser Val Cys Leu Gln 50 55 60

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Cys Ser His Ile Arg Gly Pro Ile Lys Ile Ala Arg Asn Lys Phe Pro

Arg Thr Leu Thr Ser Gln Glu Leu Arg Arg Phe Ala Glu Tyr Ser Gly 50 55 60

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Ser Leu Glu Pro Gly Arg Leu Arg Glu Glu Asn Arg Leu Asn Pro Gly

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Ser Thr Glu Gln Asp Ser Ala Ser Lys Thr Asn Lys 65 70 75

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Asn Val Gln Gly Ala Ile Cys Ser Phe Lys Lys Ile Ile Phe Gly Gln 35 40 45

Ala Gln Trp Leu Thr Pro Val Ile Pro Ala Leu Trp Glu Ala Lys Val 50 60

Gly Gly Ser Phe Glu Val Arg Ser Leu Arg Ser Ala Trp Pro Thr Trp 65 70 75 80

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Thr Gln Thr Trp Cys Leu Cys His Ser Ser Gly Leu Cys Leu Ser Pro 50 55 60

Gly Pro Pro Ser Pro Ser Met Val 65 70 <211> 77 <212> PRT

<213> Homo sapiens

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Asp Leu Pro Pro Leu Pro Trp Tyr Arg Arg Lys Val Leu

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<213> Homo sapiens

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Ser Cys Arg Asn Gly Leu Ala Ser Lys Trp Arg Gln Ala Asp Pro Ser

Asp Gly Tyr Met Glu Pro Cys Phe Gln Leu Leu Phe 50

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<211> 76

<212> PRT

<213> Homo sapiens

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Met Ser Thr Ser Asp Gly Phe Ala Pro Pro Pro Gln Leu Gly Ser Arg 20

Cys Ser His Ile Arg Gly Pro Ile Lys Ile Ala Arg Asn Lys Phe Pro 40

Arg Thr Leu Thr Ser Gln Glu Leu Arg Arg Phe Ala Glu Tyr Ser Gly 50 55 60

Met Met Phe Gly Asp Gln Thr Thr Ala Gly Gln Lys
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Val Cys Thr Gln Pro Lys Ser Pro Ser Gly Thr Val Cys Thr Ser Lys 65 70 75 80

Thr Lys Lys Ala Leu Cys Ile Thr Leu Thr Leu Gly Thr Phe Leu Val 85 90 95

Gly Ala Ala Leu Ala Ala Gly Leu Leu Trp Lys Phe Met Gly Ser Lys 100 105 110

Cys Ser Asn Ser Gly Ile Glu Cys Asp Ser Ser Gly Thr Cys Ile Asn 115 120 125

Pro Ser Asn Trp Cys Asp Gly Val Ser His Cys Pro Gly Gly Glu Asp 130 135 140

Glu Asn Arg Cys Val Arg Leu Tyr Gly Pro Asn Phe Ile Leu Gln Met 145 150 155 160

Tyr Ser Ser Gln Arg Lys Ser Trp His Pro Val Cys Gln Asp Asp Trp 165 170 175

Asn Glu Asn Tyr Gly Arg Ala Ala Cys Arg Asp Met Gly Tyr Lys Asn 180 185 190

Asn Phe Tyr Ser Ser Gln Gly Ile Val Asp Asp Ser Gly Ser Thr Ser 195 200 205

Phe Met Lys Leu Asn Thr Ser Ala Gly Asn Val Asp Ile Tyr Lys Lys 210 215

Leu Tyr His Ser Asp Ala Cys Ser Ser Lys Ala Val Val Ser Leu Arg 225 230 235 240 Cys Leu Ala Cys Gly Val Asn Leu Asn Ser Ser Arg Gln Ser Arg Ile 245 Val Gly Gly Glu Ser Ala Leu Pro Gly Ala Trp Pro Trp Gln Val Ser Leu His Val Gln Asn Val His Val Cys Gly Gly Ser Ile Ile Thr Pro Glu Trp Ile Val Thr Ala Ala His Cys Val Glu Lys Pro Leu Asn Asn Pro Trp His Trp Thr Ala Phe Ala Gly Ile Leu Arg Gln Ser Phe Met 310 Phe Tyr Gly Ala Gly Tyr Gln Val Gln Lys Val Ile Ser His Pro Asn Tyr Asp Ser Lys Thr Lys Asn Asn Asp Ile Ala Leu Met Lys Leu Gln Lys Pro Leu Thr Phe Asn Asp Leu Val Lys Pro Val Cys Leu Pro Asn Pro Gly Met Met Leu Gln Pro Glu Gln Leu Cys Trp Ile Ser Gly Trp 375 Gly Ala Thr Glu Glu Lys Gly Lys Thr Ser Glu Val Leu Asn Ala Ala 390 Lys Val Leu Leu Ile Glu Thr Gln Arg Cys Asn Ser Arg Tyr Val Tyr 405 Asp Asn Leu Ile Thr Pro Ala Met Ile Cys Ala Gly Phe Leu Gln Gly 425 Asn Val Asp Ser Cys Gln Gly Asp Ser Gly Gly Pro Leu Val Thr Ser 435 Asn Asn Asn Ile Trp Trp Leu Ile Gly Asp Thr Ser Trp Gly Ser Gly 455 Cys Ala Lys Ala Tyr Arg Pro Gly Val Tyr Gly Asn Val Met Val Phe 475 470 Thr Asp Trp Ile Tyr Arg Gln Met Lys Ala Asn Gly

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<400> 897

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834

Arg Asn His Phe Arg Cys Gln Val Gln Phe Tyr Gly Leu Ser Glu Asn 225 230 235 240

Asp Glu Trp Thr Gln Asp Arg Ala Lys Pro Val Thr Gln Ile Val Ser 245 250 255

Ala Glu Ala Trp Gly Arg Ala Asp Cys Gly Phe Thr Ser Glu Ser Tyr 260 265 270

Gln Gln Gly Val Leu Ser Ala Thr Ile Leu Tyr Glu Ile Leu Leu Gly 275 280 285

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<213> Homo sapiens

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Asp Gln Ser Tyr Gly Leu Phe Trp Tyr Lys Gln Pro Ser Ser Gly Glu
50 55 60

Met Ile Phe Leu Ile Tyr Gln Gly Ser Tyr Asp Glu Gln Asn Ala Thr 65 70 75 80

Glu Gly Arg Tyr Ser Leu Asn Phe Gln Lys Ala Arg Lys Ser Ala Asn 85 90 95

Leu Val Ile Ser Ala Ser Gln Leu Gly Asp Ser Ala Met Tyr Phe Cys 100 105 110

Ala Met Arg Glu Gly Ala Gly Gly Gly Asn Lys Leu Thr Phe Gly Thr 115 120 125

Gly Thr Gln Leu Lys Val Glu Leu Asn Ile Gln Asn Pro Asp Pro Ala 130 135 140

Val Tyr Gln Leu Arg Asp Ser Lys Ser Ser Asp Lys Ser Val Cys Leu

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45

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Asp Leu Thr Glu Ile Asp Ser Ser Gly Asp Glu Gln Ser Leu Leu Glu

Leu Ile Ile Thr Thr Lys Lys Arg Giu Ala Arg Gln Ile Leu Asp Gln 85 90 95

Thr Pro Val Lys Glu Leu Val Ser Leu Lys Trp Lys Arg Tyr Gly Arg 100 105 110

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Ala Phe Ala Ile Ile Ala Thr Leu Leu Met Leu Asn Leu Leu Ile Ala 55

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Pro Leu Cys Ser Leu 35	Tyr Leu Ile 40	Ala Val Leu	ı Gly Asn Le 45	eu Thr Ile	
Ile Tyr Ile Val Arg	Thr Glu His 55	Ser Leu His	Glu Pro Me 60	et Tyr Ile	
Phe Leu Cys Met Leu 65	Ser Gly Ile 70	Asp Ile Let 75	ı Ile Ser Ti	nr Ser Ser 80	

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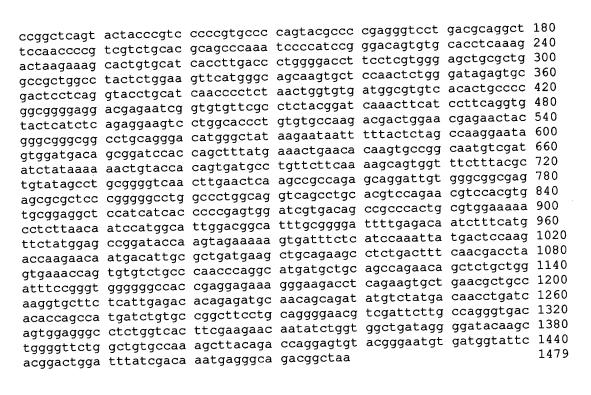
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345

340



Lys Pro Leu Thr Phe Asn Asp Leu Val Lys Pro Val Cys Leu Pro Asn 360 Pro Gly Met Met Leu Gln Pro Glu Gln Leu Cys Trp Ile Ser Gly Trp 380 375 Gly Ala Thr Glu Glu Lys Gly Lys Thr Ser Glu Val Leu Asn Ala Ala 390 395 Lys Val Leu Leu Ile Glu Thr Gln Arg Cys Asn Ser Arg Tyr Val Tyr 410 405 Asp Asn Leu Ile Thr Pro Ala Met Ile Cys Ala Gly Phe Leu Gln Gly 425 Asn Val Asp Ser Cys Gln Gly Asp Ser Gly Gly Pro Leu Val Thr Ser 440 Lys Asn Asn Ile Trp Trp Leu Ile Gly Asp Thr Ser Trp Gly Ser Gly 455 Cys Ala Lys Ala Tyr Arg Pro Gly Val Tyr Gly Asn Val Met Val Phe 475 470 Thr Asp Trp Ile Tyr Arg Gln Met Arg Ala Asp Gly 485

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 Ser Pro Pro Ala Ile Gly
 Pro Tyr Tyr Glu

 Asn His Gly
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 Asn Pro Tyr Pro Ala Gln
 Pro Thr Val

 Val Pro Thr Val
 Tyr Glu
 Val His Pro Ala Gln
 Tyr Tyr Pro Ser Pro

 Val Pro Gln
 Tyr Ala Pro Arg Val Leu Thr Gln
 Ala Ser Asn Pro Val

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 55
 60

 Val Cys Thr Gln
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Trp Cys Asp Gly Val Ser His Cys Pro Gly Gly Glu Asp Glu Asn Arg
35 40 45





Cys Val Arg Leu Tyr Gly Ser Asn Phe Ile Leu Gln Val Tyr Ser Ser Gln Arg Lys Ser Trp His Pro Val Cys Gln Asp Asp Trp Asn Glu Asn Tyr Gly Arg Ala Ala Cys Arg Asp Met Gly Tyr Lys Asn Asn Phe Tyr Ser Ser Gln Gly Ile Val Asp Asp Ser Gly Ser Thr Ser Phe Met Lys Leu Asn Thr Ser Ala Gly Asn Val Asp Ile Tyr Lys Lys Leu Tyr His Ser Asp Ala Cys Ser Ser Lys Ala Val Val Ser Leu Arg Cys Ile Ala Cys Gly Val Asn Leu Asn Ser Ser Arg Gln Ser Arg Ile Val Gly Gly Glu Ser Ala Leu Pro Gly Ala Trp Pro Trp Gln Val Ser Leu His Val Gln Asn Val His Val Cys Gly Gly Ser Ile Ile Thr Pro Glu Trp Ile Val Thr Ala Ala His Cys Val Glu Lys Pro Leu Asn Asn Pro Trp His Trp Thr Ala Phe Ala Gly Ile Leu Arg Gln Ser Phe Met Phe Tyr Gly Ala Gly Tyr Gln Val Glu Lys Val Ile Ser His Pro Asn Tyr Asp Ser Lys Thr Lys Asn Asn Asp Ile Ala Leu Met Lys Leu Gln Lys Pro Leu Thr Phe Asn Asp Leu Val Lys Pro Val Cys Leu Pro Asn Pro Gly Met Met Leu Gln Pro Glu Gln Leu Cys Trp Ile Ser Gly Trp Gly Ala Thr Glu Glu Lys Gly Lys Thr Ser Glu Val Leu Asn Ala Ala Lys Val Leu Leu Ile Glu Thr Gln Arg Cys Asn Ser Arg Tyr Val Tyr Asp Asn Leu Ile Thr Pro Ala Met Ile Cys Ala Gly Phe Leu Gln Gly Asn Val Asp Ser Cys Gln Gly Asp Ser Gly Gly Pro Leu Val Thr Ser Lys Asn Asn Ile Trp Trp Leu Ile Gly Asp Thr Ser Trp Gly Ser Gly Cys Ala Lys Ala Tyr Arg Pro Gly Val Tyr Gly Asn Val Met Val Phe Thr Asp Trp Ile Tyr Arg Gln Met Arg Ala Asp Gly